A Touchstone Energy Cooperative

## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SHELBY ENERGY COOPERATIVE, INC. APPLICATION FOR AN INCREASE IN RETAIL RATES BASED ON A HISTORICAL TEST YEAR

CASE NO. 2016-00434

THIRD DATA REQUEST OF COMMISSION STAFF
TO SHELBY ENERGY COOPERATIVE, INC.

### RECEIVED

#### MATHIS, RIGGS, PRATHER & RATLIFF, P.S.C.

MAY 5 2017

ATTORNEYS AT LAW 500 MAIN STREET, SUITE 5 SHELBYVILLE, KENTUCKY 40065

PUBLIC SERVICE COMMISSION

C. LEWIS MATHIS, JR.
T. SHERMAN RIGGS
DONALD. T. PRATHER
NATHAN T. RIGGS
ERIN R. RATLIFF

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E-MAIL donaldtpprather@gmail.com

May 3, 2017

Executive Director Public Service Commission 211 Sower Boulevard Frankfort, Kentucky 40602

Re: Shelby Energy Cooperative PSC Case No. 2016-00434

#### Gentlepersons:

Please find enclosed the original plus ten copies of the Applicant's Responses to the Commission Staff's Third Request for Information, together with Shelby Energy's Fourth Motion for Confidential Treatment of Specified Materials.

Thank you for your attention to this matter.

Very truly yours,

MATHIS, RIGGS, PRATHER & RATLIFF, P.S.C.

Donald T. Prather

DTP/pm Enclosures

### COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

| In the Matter of Adjustment of Rates | ) |                     |
|--------------------------------------|---|---------------------|
| of Shelby Energy Cooperative, Inc.   | ) | Case No. 2016-00434 |

### APPLICANT'S RESPONSES TO COMMISSION STAFF'S THIRD REQUEST FOR INFORMATION

The Applicant, Shelby Energy Cooperative, Inc., makes the following responses to the "Commission Staff's Third Request for Information" as follows:

- The witnesses who are prepared to answer questions concerning each request are Debra
  J. Martin and James R. Adkins.
- 2. Debra J. Martin, President & CEO of Shelby Energy Cooperative, Inc., is the person supervising the preparation of the responses on behalf of the Applicant.
- 3. The responses and exhibits are attached hereto and incorporated by reference herein.

Respectfully submitted,

MATHIS, RIGGS, PRATHER & RATLIFF, P.S.C.

Donald T. Prather

500 Main Street, Suite 5

Shelbyville, Kentucky 40065

Phone: (502) 633-5220

Fax: (502) 633-0667

Attorney for Shelby Energy Cooperative, Inc.

The undersigned, Debra J. Martin, as President & CEO of Shelby Energy Cooperative, Inc., being duly sworn, states that the responses herein are true and accurate to the best of my knowledge and belief formed after reasonable inquiry.

Dated: May 5, 2017

SHELBY ENERGY COOPERATIVE, INC.

DEBRA J. MARTIN, PRESIDENT & CEC

Subscribed, sworn to, and acknowledged before me by Debra J. Martin, as President & CEO for Shelby Energy Cooperative, Inc. on behalf of said Corporation this 5th day of May, 2017.

Mary E. Federle 520745

Notary Public, Kentucky State at Large

My Commission Expires: 10-7-18

The undersigned, James R. Adkins, as Consultant of Shelby Energy Cooperative, Inc., being duly sworn, states that the responses herein are true and accurate to the best of my knowledge and belief formed after reasonable inquiry.

Dated: May <u>5</u>, 2017

SHELBY ENERGY COOPERATIVE, INC.

James R. Adkins &
JAMES R. ADKINS, CONSULTANT

Subscribed, sworn to, and acknowledged before me by James R. Adkins, as Consultant of Shelby Energy Cooperative, Inc. on behalf of said Corporation this 5<sup>th</sup> day of May, 2017.

Muy E Fedule 520745

Notary Public, Kentucky State at Large

My Commission Expires: 10-7-18

### COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

| In the Matter of Adjustment of Rates | ) |                     |
|--------------------------------------|---|---------------------|
| of Shelby Energy Cooperative, Inc.   | ) | Case No. 2016-00434 |

### FOURTH MOTION FOR CONFIDENTIAL TREATMENT OF SPECIFIED MATERIALS

Pursuant to 807 KAR 5:001, Section 13 and KRS 61.878, Shelby Energy Cooperative, Inc. ("Shelby Energy") respectfully moves the Kentucky Public Service Commission (the "Commission") to designate as confidential material portions of Shelby Energy's Response to the Commission Staff's Third Request for Information. The specific information which Shelby Energy is requesting be afforded confidential treatment are the answers to Question 1.c. including Exhibit 3-1c, and Questions 4 and 19 including Exhibits 3-4 and 3-19, both of which are being submitted on a USB drive labeled "C" (hereinafter "Confidential Information").

In support of this motion, Shelby Energy states that the Confidential Information pertains to wages, salaries and benefits of employees and, as such, constitutes information of a personal nature where the public disclosure thereof would constitute a clear and unwarranted invasion of personal privacy.

Additionally, information relating to the wages, salaries and benefits of employees would unnecessarily provide interested parties and Shelby Energy's competitors with access to information regarding employee compensation and benefits. If competing utilities know what Shelby Energy pays to its employees, including the benefits afforded to employees, it will be easy for those competing utilities to attempt to hire away Shelby Energy's employees and management. Such public disclosure would unfairly harm Shelby Energy's competitive position in the market place for utility management and a skilled utility workforce, all to the detriment of Shelby Energy and its members.

The Commission has previously recognized the confidential nature of this type of information in a prior proceeding, namely In the Matter of Application of Water Service

Corporation of Kentucky for a General Adjustment in Existing Rates, Order Regarding Request for Confidential Treatment (entered April 5, 2016), Case No. 2015-00382.

The time period for these materials to be treated as confidential should be indefinitely.

WHEREFORE, Shelby Energy respectfully requests that the answers to Question 1.c. including Exhibit 3-1c, and Questions 4 and 19 including Exhibits 3-4 and 3-19, both of which are being submitted on a USB drive labeled "C", be declared by the Commission as confidential and that such treatment continue indefinitely. If this information becomes publicly available or otherwise no longer warrants confidential treatment, Shelby Energy will notify the Commission pursuant to 807 KAR 5:001, Section 13(10).

Respectfully submitted,

MATHIS, RIGGS, PRATHER & RATLIFF, P.S.C.

Donald T. Prather

500 Main Street, Suite 5

Shelbyville, Kentucky 40065

Phone: (502) 633-5220 Fax: (502) 633-0667

- 1. Refer to the application, Exhibit 1, page 1 of 10.
- a. Provide the basis for determining the wage and salary increases for union and non-union employees from 2012-2016.
- b. Explain how the annual increases comply with Shelby Energy's Wage and Salary Plan.
- c. Provide the Payroll Adjustment for the test year if the non-union wage and salary increase were to be 2 percent.

#### Response 1a:

Wages for pay increase for union employees is the result of negotiation between Shelby Energy and the representatives of the International Brotherhood of Electrical Workers (IBEW).

Salary increases for non-union employees follow the guidelines of the Wage and Salary Policy, #902. For a copy of BP #902, refer to Exhibit CC of the Commission Staff's First Request for Information. Each employee is assigned a salary grade that was established following a formal wage and salary evaluation of the position. The position was evaluated for internal equity through a point system (point factor analysis), and for external equity through research of comparable positions within the region and other cooperatives. The comparative labor market includes the city of Louisville, KY because Louisville KY is different from other cities/town near Shelbyville. It has a highly competitive labor climate and Shelbyville is part of that MSA. (See www.bls.gov -325

Metropolitan Areas - Louisville/So IN MSA). Employees in nearby "bedroom communities"

around Louisville, such as Shelbyville, are targets to have their employees recruited

away. Shelby Energy also recruits from the Louisville, KY market and must consider the

Louisville, KY labor market when establishing pay rates.

The Salary Review process is annual. The President/CEO is presented with the

results of the comparative salary research and the President/CEO may approve a change

in salary based on where the employee's pay rate is located in relationship to the midpoint

of the wage and salary range and the current "market price" in the comparative labor

market. The President/CEO approves increases that are within the salary budget and

within the salary range of comparable positions in the labor market area.

The President/CEO presents the approved rate change to the appropriate

supervisor of each employee for further consideration. The supervisor will recommend

final approval of the rate change to the President/CEO based on the results of the

employee's appraisal and performance review. Should the appraisal and performance

review not support the rate change, a consultation with the President /CEO will take place

prior to rate pay adjustment documentation for each employee being submitted to the

human resources department by the President/CEO.

Response 1b:

The annual increases for union employees follow the negotiated contract with the

IBEW.

2016-00434

are competitive and based on performance. Competitive salaries are those that are +/10% of the midpoint of the assigned salary grade. The midpoint of each salary grade is

The Wage & Salary Policy for non-union employees provides for increases that

To a the imapoint of the designed editing grade. The imapoint of eden editing grade to

the market price of the assigned position based on area and industry salary survey

research,

The process of determining whether the Wage & Salary Plan is accomplishing the

goal is validated by conducting a Compa-Ratio Analysis, whereby each employee's salary

is compared to the midpoint of the assigned salary grade. To be competitive in the local

market, the employee must be paid between .90 and 1.10 of the salary midpoint. Those

outside the range are viewed individually. Employees with a salary compa-ratio under

.90 and over 1.10 are reviewed individually to determine if the pay rate is appropriate

based on position, length of service, and expertise that is valuable to the Shelby Energy

and its members.

Because compensation is covered under the Civil Rights Act of 1964 (and

amendments), information is also reviewed to assure there is no discrimination based on

race, gender or age. An additional consideration is given to expertise that would allow an

employee to be an attractive candidate to be recruited away. Final approval of increases

is withheld until there is assurance of equity for each employee and the total cost is

reasonable and within the salary budget, and the entire salary plan review and

recommendations are approved by the Board of Directors.

2016-00434

Question 1
Page 4 of 4
Witness: Debra Martin
James Adkins

Shelby Energy Cooperative, Inc.
Commission Staff's Third Request for Information
Case No. 2016-00434

#### Response 1c:

Refer to **Exhibit 3-1c** which is included and made a part of this response for the Payroll Adjustment for non-union wages with an increase of 2%.

Witness: Debra Martin

#### Shelby Energy Cooperative Case No. 2016-00464 July 31, 2016

#### Payroll Adjustment

To reflect the increase granted by the Board of Directors, the step increases granted and promotions during the year. To give recognition to employees terminated and employees hired during the test year. Overtime pay is calculated at 1-1/2 times regular pay rate for hours worked in excess of 8 hours per day.

Temporary employees are used for certain busy times of the month, or when an employee has scheduled vacation time off. This is expected to continue into the future.

Wage and salary increases are as follows:

| 19 |      | <u>Increase</u>                |  |  |  |
|----|------|--------------------------------|--|--|--|
| 20 |      | <u> Union</u> <u>Non-Union</u> |  |  |  |
| 21 | 2016 | 2.93% 1.93%                    |  |  |  |
| 22 | 2015 | 2.47% 3.82%                    |  |  |  |
| 23 | 2014 | 2.13% 3.69%                    |  |  |  |
| 24 | 2013 | 2.04% 2.76%                    |  |  |  |
| 25 | 2012 | 3.00% 3.64%                    |  |  |  |

The amount of increase was allocated based on the actual test year.

| Projected wages | \$ 2,819,811 |
|-----------------|--------------|
|                 |              |

Actual wages for test year \$2,876,791

Adjustment \$ (56,980)

34<sup>-</sup> 

The allocation is on the following page:

### Shelby Energy Cooperative Case No. 2016-00464

Case No. 2016-00464 Witness: Debra Martin

| 3 |                                    |
|---|------------------------------------|
| 4 | Allocation of increase in payroll: |

| 4. | Allocation | or increase in payron.        |                     |                |                   |
|----|------------|-------------------------------|---------------------|----------------|-------------------|
| 5  |            |                               | Labor               |                |                   |
| 6  |            | •                             | <u>Distribution</u> | <u>Percent</u> | <u>Allocation</u> |
| 7  |            | •                             |                     |                |                   |
| 8  | 107.20     | Construction work in progress | 719,972             | 25.0%          | (14,260)          |
| 9  | 108.80     | Retirement work in progress   | 228,002             | 7.9%           | (4,516)           |
| 10 | 143.00     | Receivable from others        | 9,168               | 0.3%           | (182)             |
| 11 | 163.00     | Stores                        | 61,223              | 2.1%           | (1,213)           |
| 12 | 184.00     | Transportation                | 0                   | 0.0%           | 0                 |
| 13 | 242.52     | Employee sick leave/vacation  | 141,345             | 4.9%           | (2,800)           |
| 14 | 580.00     | Operations                    | 46,156              |                |                   |
| 15 | 583.00     | Overhead line                 | 59,658              |                |                   |
| 16 | 584.00     | Underground                   | 0                   |                |                   |
| 17 | 586.00     | Meter                         | 115,233             |                |                   |
| 18 | 587.00     | Installations                 | 7,682               |                |                   |
| 19 | 588.00     | Miscellaneous distribution    | 156,393             | 13.4%          | (7,628)           |
| 20 | 590.00     | Maintenance                   | 10,212              |                |                   |
| 21 | 593.00     | Overhead line                 | 361,827             |                | ·                 |
| 22 | 594.00     | Underground                   | 106,177             |                |                   |
| 23 | 595.00     | Transformers                  | 848                 |                | •                 |
| 24 | 597.00     | Street lights                 | 6,556               |                |                   |
| 25 | 598.00     | Miscellaneous maintenance     | 69,869              | 19.3%          | (11,003)          |
| 26 | 901.00     | Supervision                   | 75,148              |                |                   |
| 27 | 902.00     | Meter reading                 | 73,441              |                |                   |
| 28 | 903.00     | Consumer records              | 84,509              |                |                   |
| 29 | 904.00     | Consumer records              | . 0                 | 8.1%           | (4,617)           |
| 30 | 907.00     | Supervision, Customer service | 19,338              |                |                   |
| 31 | 908.00     | Consumer accounting           | 87,678              | •              |                   |
| 32 | 909.00     | Consumer information          | 28,086              |                |                   |
| 33 | 910.00     | Misc customer information     | 153,686             | 10.0%          | (5,720)           |
| 34 | 912.00     | Customer demonstration        | 9,089               | 0.3%           | (180)             |
| 35 | 920.00     | Administrative                | 194,004             |                |                   |
| 36 | 926.00     | Employee benefits             | 21,593              |                |                   |
| 37 | 930.00     | Miscellaneous                 | 26,628 ·            |                |                   |
| 38 | 935.00     | Maintenance general plant     | <u>3,270</u>        | <u>8.5%</u>    | <u>(4,863)</u>    |
| 39 |            |                               |                     |                |                   |
| 40 |            | Total                         | <u>2,876,791</u>    | <u>100.0%</u>  | <u>(56,982)</u>   |
| 41 |            |                               | <del></del>         |                | <del></del>       |

|          | Exhibit 3-1c |
|----------|--------------|
|          | Page 3 of 4  |
| Witness: | Debra Martin |

|               |             |            |             |           |         | Δ         | Ctual Test | Year Wage |        |         | Wage         |         |          | Iormalized | Test Year W | 0000   |             |
|---------------|-------------|------------|-------------|-----------|---------|-----------|------------|-----------|--------|---------|--------------|---------|----------|------------|-------------|--------|-------------|
| Employee      |             | Hours Work | ad Tart Var | ar.       |         |           | Excess     | Salary    | Stanby |         | Rate         | I       | ,        |            |             |        | Namenlin: 1 |
|               | Regular     | Overtime   |             | Total     | Regular | Overtime  | 4          | Overtime  | =      | Total   | 11           | D1      |          | Excess     | Salary      | Stanby | Normalized  |
| <u>Number</u> | Regulai     | Overtime   | Vac Pay     | Total     | Regulai | LOvertime | vac Pay    | Overnine  | Pay    | Total   | 2% non-union | Regular | Overtime | Vac Pay    | Overtime    | Pay    | Total       |
| Salaried Em   | ployees:    |            |             |           |         |           |            |           |        |         |              |         |          |            |             |        | *           |
| 601           | 2,080.00    |            |             | 2,080.00  |         |           |            |           |        |         |              |         |          |            | <b>.</b>    |        |             |
| 702           | 2,080.00    |            | 40.00       | 2,120.00  |         |           |            |           |        |         |              |         |          |            | _           |        |             |
| 706           | 2,080.00    |            | 40.00       | 2,120.00  |         |           |            |           |        |         | =            |         |          |            |             |        |             |
| 801           | 2,080.00    |            |             | 2,080.00  |         |           | _          | _         |        |         |              |         |          |            |             |        |             |
| 1304          | 2,080.00    | • •        | 40.00       | 2,120.00  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1307          | . 2,0,80.00 |            | 40.00       | 2,120.00  |         |           |            | _         |        |         |              |         |          |            |             |        |             |
| 1316          | 1,670.75    |            |             | 1,670.75  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 2314          | 2,080.00    |            |             | 2,080.00  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| Subtotal      | 16,230.75   | 0.00       | 160.00      | 16,390.75 | 656,977 | 0         | 7,520      | 2,940     | 25,080 | 692,517 |              | 665,101 | 0        | 7,520      | 2,940       | 25,080 | 700,641     |
| Hourly Emp    | lovees:     |            |             |           |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 208           | 2,080.00    | 18.00      | 40.00       | 2,138.00  |         |           | _          |           |        |         |              |         | _        |            |             |        |             |
| 210           | 2,008.00    | 328.00     | 8.00        | 2,344.00  |         |           |            |           |        |         |              |         | _=       |            |             |        |             |
| 301           | 2,080.00    | 4.25       | 0.00        | 2,084.25  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 302           | 2,080.00    | 382.25     | 40.00       | 2,502.25  |         |           |            |           |        |         |              |         |          |            |             |        | · <b>==</b> |
| 304           | 2,080.00    | 5.50       | 10.00       | 2,085.50  |         |           |            |           |        |         | • ==         |         |          |            |             |        |             |
| 306           | 2,080.00    | 357.25     |             | 2,437.25  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 310           | 2,080.00    | 15.25      |             | 2,095.25  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 403           | 2,080.00    | 4.75       |             | 2,084.75  |         |           |            |           | _      |         |              |         |          |            |             |        |             |
| 501           | 2,080.00    | 169.50     | 40.00       | 2,289.50  |         |           | _          | •         |        |         |              |         |          |            |             |        | . —         |
| 503           | 2,080.00    | 326.25     |             | 2,406.25  |         |           |            |           |        |         | =            |         |          |            |             |        |             |
| 705           | 1,828.25    | 34.25      |             | 1,862.50  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 709           | 2,080.00    | 9.50       |             | 2,089.50  |         | =         |            |           |        |         |              |         |          | 4          |             |        |             |
| 710           | 2,080.00    | 5.00       |             | 2,085.00  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1101          | 2,080.00    | 9.50       |             | 2,089.50  |         |           |            |           | •      |         |              |         |          |            |             |        |             |
| 1303          | 2,080.00    |            |             | 2,080.00  |         |           |            |           |        |         |              |         | _        |            |             |        |             |
| 1306          | 2,080.00    |            | 40.00       | 2,120.00  |         |           |            |           |        |         |              |         |          |            |             |        | =           |
| 1308          | 1,919.00    | 4.50       |             | 1,923.50  |         |           |            | •         |        |         |              |         |          | _          |             |        | _           |
| 1310          | 2,080.00    | 336.00     |             | 2,416.00  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1311          | 2,080.00    | 13.75      |             | 2,093.75  |         |           |            |           |        |         |              |         | _        |            |             |        |             |
| 1313          | 2,080.00    |            |             | 2,080.00  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1314          | 1,920.00    |            |             | 1,920.00  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1315          | 2,072.00    | 9.50       |             | 2,081.50  |         |           |            |           |        |         |              |         |          | •          |             |        |             |
| 1317          | 1,037.00    | 251.25     |             | 1,288.25  |         |           |            |           | •      |         |              |         |          |            |             |        |             |
| 1403          | 2,080.00    | 360.00     |             | 2,440.00  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1701          | 2,080.00    | 40.00      |             | 2,120.00  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1801 ·        | 2,080.00    | 296.00     |             | 2,376.00  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1902          | 2,080.00    | 352.25     |             | 2,432.25  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1911          | 2,072.50    | 121.00     |             | 2,193.50  |         |           |            |           |        |         |              |         |          |            |             |        |             |
| 1912          | 2,080.00    | 402.50     |             | 2,482.50  |         |           |            |           |        |         |              |         |          |            |             | _      |             |
| 2306          | 2,040.00    | 317.50     |             | 2,357.50  |         |           |            |           |        |         |              |         |          |            |             |        |             |
|               | 2,080.00    | 313.25     |             | 2,393.25  |         |           |            |           |        |         |              |         |          |            |             |        |             |

Exhibit 3-1c Page 4 of 4 Witness: Debra Martin

|               |                      |                  |             |                        |           | . А      | ctual Test | Year Wage | S      |           | Wage         |           | N        | ormalized 7 | Test Year Wa | ages   |            |
|---------------|----------------------|------------------|-------------|------------------------|-----------|----------|------------|-----------|--------|-----------|--------------|-----------|----------|-------------|--------------|--------|------------|
| Employee      |                      | Hours Work       | ed Test Yéa | ar                     | ]         |          | Excess     | Salary    | Stanby |           | Rate         |           |          | Excess      | Salary       | Stanby | Normalized |
| <u>Number</u> | Regular              | Overtime         | Vac Pay     | Total                  | Regular   | Overtime | Vac Pay    | Overtime  | Pay    | Total     | 2% non-union | Regular   | Overtime | Vac Pay     | Overtime     | Pay    | Total      |
| 2212          | 1 027 00             | 15475            |             | 2 001 75               |           |          |            |           |        |           |              |           |          |             |              |        | <u>-</u>   |
| 2312<br>2315  | 1,927.00<br>2,063.00 | 154.75<br>352.00 |             | 2,081.75<br>· 2,415.00 |           |          |            |           |        |           |              |           |          |             |              |        |            |
|               | 2,005.00             | 332.00           |             | 2,415.00               |           |          |            |           |        |           |              |           |          |             |              |        |            |
| Subtotal      | 66,726.75            | 4,993.50         | 168.00      | 71,888.25              | 1,814,183 | 242,676  | 4,919      | 127       | 6,625  | 2,068,530 |              | 1,813,410 | 243,331  | 4,919       | 127          | 6,625  | 2,068,413  |
|               |                      |                  |             |                        |           |          |            |           |        |           |              |           |          |             |              |        |            |
| Summer and    |                      |                  | :           |                        |           |          |            |           |        |           |              | •         |          |             |              |        |            |
| 708           | 288.00               | 0.50             |             | 288.50                 |           |          |            |           |        |           |              |           | 1        |             |              |        |            |
| 1318          | 627.00               | 3.50             |             | 630.50                 |           |          |            |           |        |           |              |           |          |             |              |        |            |
| 1319          | 104,00               | 3.00             |             | 107.00                 |           |          |            |           |        |           |              |           |          |             |              |        |            |
| 1802          | 327.00               |                  |             | 327.00                 | 5,539     | _        |            |           |        |           |              |           | 0        |             |              |        |            |
| 2316          | 344.00               |                  |             | 344.00                 |           |          |            |           |        |           |              |           | 0        |             |              |        |            |
|               |                      |                  |             |                        |           |          |            | -         |        | . ——      |              |           |          |             |              |        |            |
| Subtotal      | 1,690.00             | 7.00             | 0.00        | 1;697.00               | 27,247    | 161      | 0          | 0         | 0      | 27,408    |              | 50,593    | 164      | 0           | 0            | 0      | 50,757     |
| Retirces:     |                      |                  |             |                        |           |          |            |           |        |           |              | •         |          |             |              |        |            |
| 1305          | 1,850.00             |                  |             | 1,850.00               |           |          |            |           |        |           |              |           |          |             |              |        | 0          |
|               | ·                    |                  |             | ,                      |           |          |            | _         |        |           |              |           | ·        |             |              |        | · ·        |
| Subtotal      | 1,850.00             | 0.00             | 0.00        | 1,850.00               |           | 0        | 0          |           |        |           |              | 0         | 0        | 0           | 0            | 0      | 0          |
| Total         | 86,497.50            | 5,000.50         | 328.00      | 91,826.00              | 2,581,495 | 242,837  | 12,440     | 3,716     | 36,303 | 2,876,791 | •            | 2,529,104 | 243.495  | 12,440      | 3,067        | 31,705 | 2,819,811  |

2. Refer to the application, Exhibit 1, page 2, and Exhibit 2, page 1. Explain why the allocation factors used in these exhibits differ. Provide revised schedules as necessary.

#### Response 2:

There were some reclassifications made to the labor distribution after the ratio was used for the payroll tax adjustment. Refer to **Exhibit 3-2** for a revised schedule of Exhibit 2, Page 1 of the Application.

Exhibit 3-2 Page 1 of 1

Revised Exhibit 2, Page 1 of the Application

Witness: James Adkins

#### Shelby Energy Cooperative Case No. 2016-00464

**Payroll Taxes** 

The employer's portion of FICA and Medicare rates remain the same for 2016 as they were for 2015. The FICA rate is 6.2% and Medicare is 1.45%. The wage limit increased to \$118,500 in 2016 and was \$117,000 in 2015 for FICA; all wages are subject to Medicare.

Federal unemployment rates are 0.80% for the first \$7,000 of wages and state unemployment rate is 2.01% for the first \$10,200 of wages.

| 13 | Proposed FICA amounts |         |         |
|----|-----------------------|---------|---------|
| 14 | FICA                  | 175,345 | •       |
| 15 | Medicare              | 41,565  |         |
| 16 |                       | 216,910 |         |
| 17 | Proposed FUTA         | 5,628   |         |
| 18 | Proposed SUTA         | 9,050   | 231,588 |
| 19 |                       |         |         |
| 20 | Test year amount      | ·       |         |
| 21 | FICA and Medicare     | 221,625 |         |
| 22 | Test year FUTA        | 3,910   |         |
| 23 | Test year SUTA        | 9,313   | 234,848 |
| 24 | •                     |         |         |
| 25 | Increase              |         | (3.260) |

| 20 |           |                            |                |               |                   |               |
|----|-----------|----------------------------|----------------|---------------|-------------------|---------------|
| 27 |           |                            | _Revis         | sed_          | <u> I</u> n Appli | <u>cation</u> |
| 28 | Adjustme  | nt:                        | <u>Percent</u> | <u>Amount</u> | <u>Percent</u>    | <u>Amount</u> |
| 29 |           | •                          |                |               |                   |               |
| 30 | 107       | Capitalized                | 32.95%         | (1,074)       | 32.71%            | (1,067)       |
| 31 | 163 - 416 | Clearing and others        | 7.36%          | (240)         | 8.04%             | (262)         |
| 32 | 580       | <b>Operations</b>          | 13.39%         | (436)         | 13.29%            | (433)         |
| 33 | 590       | Maintenance                | 19.31%         | (630)         | 19.17%            | (625)         |
| 34 | 901       | Consumer accounts          | 8.10%          | (264)         | 8.04%             | (262)         |
| 35 | 908       | Customer service           | 10.04%         | (327)         | 9.96%             | (325)         |
| 36 | 912       | Sales                      | 0.32%          | (10)          | 0.31%             | (10)          |
| 37 | 920       | Administrative and general | 8.53%          | (278)         | 8.47%             | (276)         |
| 38 |           |                            |                |               |                   |               |
| 39 |           |                            | 100.00%        | (\$3,260)     | 100.00%           | (\$3,260)     |
| 40 | •         | ·                          |                |               |                   |               |
| 41 |           | Amount expensed            | _              | (\$1,946)     | _                 | (\$1,932)     |
|    |           |                            | -              |               | -                 |               |

State unemployment (SUTA) wage rates are as follows:

| 45 |  |
|----|--|
| 46 |  |
| 47 |  |

| 2016 | 2.01% |
|------|-------|
| 2015 | 2.02% |
| 2014 | 1.80% |
| 2013 | 1.80% |
| 2012 | 1.80% |

Witness: James Adkins

### Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

3. Refer to the application, Exhibit 3, page 2 of 6, and to Case No. 2016-00367, the application, Exhibit 3, page 2 of 6. Explain why the percentages used to allocate the proposed increase in depreciation expense are the same in both exhibits. Provide any necessary revisions to any affected exhibits.

#### Response 3:

The format for Case No. 2016-00367 was inadvertently used for the exhibit referenced. Refer to **Exhibit 3-3** for a revised Exhibit 3, Page 2 of the Application.

Exhibit 3-3 Page 1 of 1 Revised Exhibit 3, Page 2 of Application Witness: James Adkins

#### **Shelby Energy Cooperative** Case No. 2016-00434 July 31, 2016

| 8 |   |
|---|---|
| 9 | • |
| 1 | 0 |
| 1 | 1 |

13

15

17

20

24

25 26 27

28

Distribution plant 2,971,207 General plant 218,799 Less charged to clearing (150,002) 3,040,004 12 Test year depreciation accrual: Distribution plant 2,552,809 14 General plant 213,686 Less charged to clearing (144,831)16 2,621,664 Normalized depreciation adjustment -418,340 18 19 Transportation clearing 21 Normalized accrual 150,002 Test year accrual 144,831 5,171

Normalized depreciation accrual:

The allocation of the increase in depreciation on transportation equipment is based on actual test year transportation clearing.

| 29       |                                  | _Re      | <u>vised</u>  | Per App  | lication      |
|----------|----------------------------------|----------|---------------|----------|---------------|
| 30<br>31 | Account                          | <u>%</u> | <u>Amount</u> | <u>%</u> | <u>Amount</u> |
| 32       | Construction and retirement WIP  | 48%      | \$2,482       | 34%      | \$1,781       |
| 33       | Others                           | 1%       | 52            | 1%       | 61            |
| 34       | Distribution - operations        | . 15%    | 776           | 15%      | 778           |
| 35       | Distribution - maintenance       | 31%      | 1,603         | 27%      | 1,391         |
| 36       | Consumer accounts                | 1%       | 52            | 7%       | 358           |
| 37       | Consumer service and information | 2%       | 103           | 6%       | 295           |
| 38       | Administrative and general       | 2%       | 103           | 10%      | 507           |
| 39       | Total                            | 100%     | \$5,171       | 100.00%  | \$5,171       |
| 40       |                                  |          |               |          |               |
| 41       | Expense amount                   |          | \$2,637       |          | \$3,329       |
|          |                                  |          |               |          |               |

4. Refer to the application, Exhibit 1, and Shelby Energy's response to Commission Staff's Second Request for Information ("Staff's Second Request"), Item 31. Shelby Energy calculates its "projected wages based on a 2,080-hour work year." Provide a revised schedule that calculates the "Projected Wages" using the actual regular hours worked by each employee in the test year. Provide this schedule in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.

#### Response 4:

Refer to the <u>Confidential</u> electronic version of the Excel spreadsheet contained on **USB Drive (C)** labeled **Exhibit 3-4** which has been included with this response.

Shelby Energy Cooperative Case No. 2016-00464 July 31, 2016

.5 .6

#### **Payroll Adjustment**

To reflect the increase granted by the Board of Directors, the step increases granted and promotions during the year. To give recognition to employees terminated and employees hired during the test year. Overtime pay is calculated at 1-1/2 times regular pay rate for hours worked in excess of 8 hours per day.

Temporary employees are used for certain busy times of the month, or when an employee has scheduled vacation time off. This is expected to continue into the future.

Wage and salary increases are as follows:

| 19 |      | <u> </u>     |           |  |  |
|----|------|--------------|-----------|--|--|
| 20 | •    | <u>Union</u> | Non-Union |  |  |
| 21 | 2016 | 2.93%        | 1.93%     |  |  |
| 22 | 2015 | 2.47%        | 3.82%     |  |  |
| 23 | 2014 | 2.13%        | 3.69%     |  |  |
| 24 | 2013 | 2.04%        | 2.76%     |  |  |
| 25 | 2012 | 3.00%        | 3.64%     |  |  |

The amount of increase was allocated based on the actual test year.

| 29 | Projected wages            | \$ 2,806,665 |
|----|----------------------------|--------------|
| 30 |                            |              |
| 31 | Actual wages for test year | \$ 2,876,791 |
| 32 | ·                          |              |
| 33 | Adjustment                 | \$ (70,126)  |

The allocation is on the following page:

| 1<br>2<br>3 |            | Witness: Ja                   | Exhibit 3-4<br>Page 2 of 4<br>mes Adkins |               |                 |
|-------------|------------|-------------------------------|--|---------------|-----------------|
| 4           | Allocation | of increase in payroll:       | ,  |               |                 |
| 5           |            |                               | Labor                                    |               |                 |
| 6           |            |                               | <u>Distribution</u>                      | Percent       | Allocation      |
| 7           | •          |                               |  |               |                 |
| 8           | 107.20     | Construction work in progress | 719,972                                  | 25.0%         | (17,550)        |
| 9           | 108.80     | Retirement work in progress   | 228,002                                  | 7.9%          | (5,558)         |
| . 10        | 143.00     | Receivable from others        | 9,168                                    | 0.3%          | (223)           |
| 11          | 163.00     | Stores                        | 61,223                                   | 2.1%          | (1,492)         |
| 12          | 184.00     | Transportation                | . 0                                      | 0.0%          | 0               |
| 13          | 242.52     | Employee sick leave/vacation  | 141,345                                  | 4.9%          | (3,445)         |
| 14          | 580.00     | Operations                    | 46,156                                   |               |                 |
| 15          | 583.00     | Overhead line                 | 59,658                                   |               |                 |
| 16          | 584.00     | Underground                   | 0  |               |                 |
| 17          | 586.00     | Meter.                        | 115,233                                  |               |                 |
| 18          | 587.00     | Installations                 | 7,682                                    |               | •               |
| 19          | 588.00     | Miscellaneous distribution    | 156,393                                  | 13.4%         | (9,388)         |
| 20          | 590.00     | Maintenance                   | 10,212                                   |               |                 |
| 21          | 593.00     | Overhead line                 | 361,827                                  |               |                 |
| 22          | 594.00     | Underground                   | 106,177                                  |               |                 |
| 23          | 595.00     | Transformers                  | 848                                      |               |                 |
| 24          | 597.00     | Street lights                 | 6,556                                    |               |                 |
| 25          | 598.00     | Miscellaneous maintenance     | 69,869                                   | 19.3%         | (13,541)        |
| 26          | 901.00     | Supervision                   | 75,148                                   |               |                 |
| 27          | 902.00     | Meter reading                 | 73,441                                   |               |                 |
| 28          | 903.00     | Consumer records              | 84,509                                   |               |                 |
| 29          | 904.00     | Consumer records              | 0  | 8.1%          | (5,682)         |
| 30          | 907.00     | Supervision, Customer service | 19,338                                   |               |                 |
| 31          | 908.00     | Consumer accounting           | 87,678                                   |               | •               |
| 32          | 909.00     | Consumer information          | 28,086                                   |               |                 |
| 33          | 910.00     | Misc customer information     | 153,686                                  | 10.0%         | (7,040)         |
| 34          | 912.00     | Customer demonstration        | 9,089                                    | 0.3%          | (222)           |
| 35          | 920.00     | Administrative                | 194,004                                  |               |                 |
| 36          | 926.00     | Employee benefits             | 21,593                                   |               |                 |
| 37          | 930.00     | Miscellaneous                 | 26,628                                   |               |                 |
| 38          | 935.00     | Maintenance general plant     | <u>3,270</u>                             | <u>8.5%</u>   | <u>(5,984)</u>  |
| 39          |            |                               | ,  |               |                 |
| 40          |            | Total                         | · <u>2,876,791</u>                       | <u>100.0%</u> | <u>(70,125)</u> |

July 31, 2016

|             |           |            |            | July      | 31, 2010 |          |            | . ,       |        |         |          |         |          |            |              |        |            |
|-------------|-----------|------------|------------|-----------|----------|----------|------------|-----------|--------|---------|----------|---------|----------|------------|--------------|--------|------------|
|             | <u> </u>  |            |            |           |          | A        | ctual Test | Year Wage | es     |         | Wage     |         | N        | Vormalized | Test Year Wa | ages   |            |
| Employee    |           | Hours Work | ed Test Ye | ar        |          |          | Excess     | Salary    | Stanby |         | Rate     |         |          | Excess     | Salary       | Stanby | Normalized |
| Number      | Regular   | Overtime   | Vac Pay    | Total     | Regular  | Overtime | Vac Pay    | Overtime  | Pay    | Total   | 1-Nov-15 | Regular | Overtime |            | Overtime     | Pay    | Total      |
|             |           |            |            |           |          |          |            |           |        |         |          |         |          |            |              |        |            |
| Salaried En |           |            |            |           |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 601         | 2,080.00  |            |            | 2,080.00  | ·        |          |            |           |        |         |          |         |          |            |              |        |            |
| 702         | 2,080.00  |            | 40.00      | 2,120.00  | _        |          |            |           |        |         |          |         |          |            |              |        |            |
| 706         | 2,080.00  |            | 40.00      | 2,120.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 801         | 2,080.00  |            |            | 2,080.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1304        | 2,080.00  |            | 40.00      | 2,120.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1307        | 2,080.00  |            | 40.00      | 2,120.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1316        | 1,670.75  |            |            | 1,670.75  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 2314        | 2,080.00  |            |            | 2,080.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 0-1         | 16 220 75 | 0.00       | 160.00     | 16 200 75 | 656.000  | 0        | T 500      | 2.040     | 25.000 | 600 515 |          | (71 0 7 | •        | <b></b>    | • • • •      |        |            |
| Subtotal    | 16,230.75 | 0.00       | 160.00     | 16,390.75 | 656,977  | 0        | 7,520      | 2,940     | 25,080 | 692,517 |          | 651,956 | . 0      | 7,520      | 2,940        | 25,080 | 687,496    |
| Hourly Em   | olovees:  |            |            |           |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 208         | 2,080.00  | 18.00      | 40.00      | 2,138.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 210         | 2,008.00  | 328.00     | 8.00       | 2,344.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 301         | 2,080.00  | 4.25       | 0.00       | 2,084.25  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 302         | 2,080.00  | 382.25     | 40.00      | 2,502.25  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 304         | 2,080.00  | 5.50       |            | 2,085.50  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 306         | 2,080.00  | 357.25     |            | 2,437.25  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 310         | 2,080.00  | 15.25      |            | 2,095.25  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 403         | 2,080.00  | 4.75       |            | 2,084.75  |          |          |            |           |        |         |          | •       |          |            |              |        |            |
| 501         | 2,080.00  | 169.50     | 40.00      | 2,289.50  |          |          |            | •         |        |         |          |         |          |            |              |        | •          |
| 503         | 2,080.00  | 326.25     |            | 2,406.25  |          |          |            |           | •      |         |          |         |          |            |              |        |            |
| 705         | 1,828.25  | 34.25      |            | 1,862.50  |          |          |            |           |        |         |          |         | 700      |            |              |        |            |
| 709         | 2,080.00  | 9.50       |            | 2,089.50  |          |          |            |           |        |         | •        |         | 711      |            |              |        |            |
| 710         | 2,080.00  | 5.00       |            | 2,085.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1101        | 2,080.00  | 9.50       |            | 2,089.50  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1303        | 2,080.00  |            |            | 2,080.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1306        | 2,080.00  |            | 40.00      | 2,120.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1308        | 1,919.00  | 4.50       |            | 1,923.50  |          |          |            |           |        |         |          |         |          |            |              |        | •          |
| 1310        | 2,080.00  | 336.00     |            | 2,416.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1311        | 2,080.00  | 13.75      |            | 2,093.75  |          | 78       |            |           |        |         |          |         |          |            |              |        |            |
| 1313        | 2,080.00  |            |            | 2,080.00  | . 1      | _        |            |           |        |         |          |         |          |            |              |        |            |
| 1314        | 1,920.00  |            |            | 1,920.00  |          |          |            |           |        |         |          | ,       |          |            |              |        |            |
| 1315        | 2,072.00  | 9.50       |            | 2,081.50  |          |          |            |           |        |         |          |         |          |            | _            |        |            |
| 1317        | 1,037.00  | 251.25     |            | 1,288.25  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1403        | 2,080.00  | 360.00     |            | 2,440.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1701        | 2,080.00  | 40.00      |            | 2,120.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1801        | 2,080.00  | 296.00     |            | 2,376.00  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1902        | 2,080.00  | 352.25     |            | 2,432.25  |          |          |            |           |        |         |          |         |          |            |              |        |            |
| 1911        | 2,072.50  | 121.00     |            | 2,193.50  |          |          | •          |           |        |         |          |         |          |            |              |        |            |
| 1912        | 2,080.00  | 402.50     |            | 2,482.50  |          |          |            |           | _      |         |          |         |          |            |              |        |            |

Exhibit 3-4 Page 4 of 4 Witness: James Adkins

July 31, 2016

|            |             |            |         |           |              |          | -41 T4  |           |        |             | 137      | Normalized Test Year Wages |          |         |          |        |            |
|------------|-------------|------------|---------|-----------|--------------|----------|---------|-----------|--------|-------------|----------|----------------------------|----------|---------|----------|--------|------------|
| 1          | <del></del> |            | 100     |           | <del> </del> | A        | _       | Year Wage |        | <del></del> | Wage     | L .                        | N        |         |          |        |            |
| Employee   | l           | Hours Work |         |           |              |          | Excess  | Salary    | Stanby | Î l         | Rate     | п                          | l- I     | Excess  | Salary   | Stanby | Normalized |
| Number     | Regular     | Overtime   | Vac Pay | Total     | Regular      | Overtime | Vac Pay | Overtime  | Pay    | Total       | 1-Nov-15 | Regular                    | Overtime | Vac Pay | Overtime | Pay    | Total      |
| 2226       |             | 0.1        |         |           |              |          |         |           |        |             |          |                            |          |         |          |        |            |
| 2306       | 2,040.00    | 317.50     |         | 2,357.50  |              |          |         |           |        |             |          |                            |          |         |          |        |            |
| 2309       | 2,080.00    | 313.25     |         | 2,393.25  |              |          |         |           |        |             |          |                            |          |         |          |        |            |
| 2312       | 1,927.00    | 154.75     |         | 2,081.75  |              |          |         |           |        |             |          |                            |          |         |          |        |            |
| 2315       | 2,063.00    | 352.00     |         | 2,415.00  |              |          |         |           |        |             |          |                            |          |         | •        |        |            |
| Subtotal   | 66,726.75   | 4,993.50   | 168.00  | 71,888.25 | 1,814,183    | 242,676  | 4,919   | 127       | 6,625  | 2,068,530   |          | 1,813,410                  | 243,331  | 4,919   | 127      | 6,625  | 2,068,413  |
| Summer and | l Part Time | Employees  | :       |           |              |          |         |           |        |             |          |                            |          |         |          | •      |            |
| 708        | 288.00      | 0.50       |         | 288.50    |              |          |         |           |        |             |          |                            |          |         |          |        |            |
| 1318       | 627.00      | 3.50       |         | 630.50    | 1            |          |         |           |        |             | •        |                            |          |         |          |        |            |
| 1319       | 104.00      | 3.00       |         | 107.00    |              |          |         |           |        | 788         |          | 700                        |          |         | •        |        | 7          |
| 1802       | 327.00      | 2.00       |         | 327.00    |              |          |         |           |        |             | - 1      |                            | <b>-</b> |         |          |        |            |
| 2316       | 344.00      |            |         | 344.00    |              |          |         |           |        |             |          |                            | 0        |         |          |        |            |
| 2510       | 344.00      |            |         | 344.00    |              |          |         |           |        |             |          |                            | U        |         |          |        |            |
| Subtotal   | 1,690.00    | 7.00       | 0.00    | 1,697.00  | 27,247       | 161      | ō       | 0         | 0      | 27,408      |          | 50,593                     | 164      | 0       | 0        | 0      | 50,757     |
| Retirees:  |             |            |         |           | 4            |          |         |           |        |             |          |                            |          | •       |          | •      |            |
| 1305       | 1,850.00    |            |         | 1,850.00  |              |          |         |           |        |             |          |                            |          | -       |          | ,      | . 0        |
|            | •           |            | ·       | ,         |              |          |         | _         |        |             |          |                            |          |         |          |        | ·          |
| Subtotal   | 1,850.00    | 0.00       | 0.00    | 1,850.00  |              | 0        | 0       |           |        |             |          | 0                          | 0        | 0       | 0        | 0      | 0          |
| Total      | 86,497.50   | 5,000.50   | 328.00  | 91,826.00 | 2,581;495    | 242,837  | 12,440  | 3,716     | 36,303 | 2,876,791   |          | 2,515,959                  | 243,495  | 12,440  | 3,067    | 31,705 | 2,806,665  |

- 5. Refer to the application, Exhibit 9, page 3 of 5.
- a. Provide a detailed description of each item listed in the table below and explain why the cost should be allowed for ratemaking purposes.

| Vendor Name             | <u>Description</u>      | Amount  |
|-------------------------|-------------------------|---------|
| a. GDS Associates, Inc. | Consultants-Engineering | \$1,500 |
| b. GDS Associates, Inc. | Consultants-Engineering | \$1,500 |
| c. GDS Associates, Inc. | Consultants-Engineering | \$ 630  |
| d. GDS Associates, Inc. | Consultants-Engineering | \$ 306  |
| e. GDS Associates, Inc. | Consultants-Engineering | \$ 383  |
| f. GDS Associates, Inc. | Consultants-Engineering | \$ 480  |
| g. GDS Associates, Inc. | Consultants-Engineering | \$ 480  |
| h. GDS Associates, Inc. | Consultants-Engineering | \$1,096 |
| i. GDS Associates, Inc. | Consultants-Engineering | \$1,558 |

#### Response 5a:

Shelby Energy's does not have a professional engineer on staff and outsources engineering functions that require this expertise to GDS Associates, Inc. ("GDS"). GDS performs periodic work order inspections which require the signature of a professional engineer to meet RUS requirements. In addition, GDS provides assistance to the staking technicians regarding planning and design on larger projects and provides supporting engineering services as needed by the Manager of Engineering and/or the VP of Operations and Engineering. These costs are part of the required day to day engineering functions needed to meet the growth and development on the distribution system and should be allowed for ratemaking purposes. Refer to Exhibit 3-5a which provides a detailed description of each item listed in the table and is included as part of this response.

Witness: Debra Martin

### Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

b. On May 31, 2016, there is a payment to Mathis, Riggs, Prather of \$3,427 described as "Misc Legal Svs - Refinance." Provide a detailed explanation as to why this legal fee was not recovered in the refinancing cost.

#### Response 5b:

Only electric plant can be financed with long-term debt, and RUS does not allow financing of legal fees for long-term debt. Since the initial RUS debt financed electric plant, Shelby Energy could refinance with long-term debt.

Exhibit 3-5a

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# Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

|          | GDS Associates, Inc. |            |  |  |  |  |  |  |  |  |
|----------|----------------------|------------|--|--|--|--|--|--|--|--|
| Date     | Check                | Amount     | Detailed Description   |  |  |  |  |  |  |  |
| 08/24/15 | 63176                | \$1,500.00 | Monthly retainer for general engineering consulting services from (06/27/15 - 07/31/15)  |  |  |  |  |  |  |  |
| 09/24/15 | 63427                | \$1,500.00 | Monthly retainer for general engineering consulting services from 08/01/15 - 08/31/15  |  |  |  |  |  |  |  |
| 10/21/15 | 63711                | \$630.00   | Review coordination for intellirupter sectionalizing; meeting to review UG design and layout of commercial property; meeting to review Defoe substation and intellirupter sectionalizing   |  |  |  |  |  |  |  |
| 12/22/15 | 64162                | \$306.00   | Prepare spreadsheet of recloser locations; prepare sectionalizing spreadsheets; prepare UG distribution primary layout for Persimmon Ridge subdivision expansion and email   |  |  |  |  |  |  |  |
| 01/25/16 | 64378                | \$382.50   | Call to discuss update to Persimmon Ridge UG expansion project; call to verify sag charts; review intellirupter layout for industrial park; prepare comparison of guying 1/0 ACSR and 2 ACSR   |  |  |  |  |  |  |  |
| 02/25/16 | 64640                | \$480.00   | Review sectionalizing questions; prepare updates to sectionalizing; review changes due to model issues   |  |  |  |  |  |  |  |
| 03/23/16 | 64839                | \$480.00   | Prepare updates to sectionalizing per request; prepare and email recloser information  |  |  |  |  |  |  |  |
| 04/22/16 | 65071                | \$1,096.00 | Review Defoe substation amendment, update Defoe amendment and send to Shelby for RUS review; Waze subdivision and size transformers for voltage drop and flicker; generate DWG for Waze II; work on UG layout for Waze; finalize and email Defoe CWP amendment   |  |  |  |  |  |  |  |
| 05/24/16 | 65212                | \$1,558.00 | Work on DWG for Waze II; prepare UG layout for Waze property; work on DWG for Waze II; finalize UG of Waze property and email; meeting with Shelby to review and design UG primary layout for three projects; review questions on sectionalizing, prepare response and email; finalize and email Martini Lane work order inspection report |  |  |  |  |  |  |  |

6. Refer to the Application, Exhibit 10. Provide an explanation of any items paid listed as VISA in the Meals column.

#### Response 6:

Refer to **Exhibit 3-6** for an explanation for any items paid and listed as VISA in the Meals column in Exhibit 10 of the Application. This exhibit is included and made a part of this response.

Exhibit 3-6 Page 1 of 1

Witness: Debra Martin

# Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

|          | VISA - Meal Column /Application, Exhibit 10 |          |   |  |  |  |  |  |  |  |
|----------|---|----------|---|--|--|--|--|--|--|--|
| Date     | Check                                       | Amount   | Detailed Description  |  |  |  |  |  |  |  |
| 08/19/15 | 63136                                       | \$66.89  | Board room supplies and snacks for board and other meetings |  |  |  |  |  |  |  |
| 09/18/15 | 63314                                       | \$35.00  | Board meeting lunch for 08/27/15                            |  |  |  |  |  |  |  |
| 09/18/15 | 63366                                       | \$157.27 | Board meeting lunch and supplies for 08/27/15               |  |  |  |  |  |  |  |
| 10/19/15 | 63616                                       | \$111.65 | Board meeting lunch for 10/19/15                            |  |  |  |  |  |  |  |
| 11/18/15 | 63858                                       | \$56.68  | Board meeting lunch and supplies for 11/19/15               |  |  |  |  |  |  |  |
| 02/17/16 | 64545                                       | \$19.66  | Board room supplies and snacks for board and other meetings |  |  |  |  |  |  |  |
| 03/20/16 | 64783                                       | \$19.62  | Board room supplies and snacks for board and other meetings |  |  |  |  |  |  |  |
| 04/18/16 | 65010                                       | \$32.36  | Board room supplies and snacks for board and other meetings |  |  |  |  |  |  |  |
| 05/19/16 | 65227                                       | \$24.97  | Board room supplies and snacks for board and other meetings |  |  |  |  |  |  |  |
| 06/19/16 | 65445                                       | \$30.25  | Board room supplies and snacks for board and other meetings |  |  |  |  |  |  |  |
| 07/19/16 | 65666                                       | \$36.26  | Board room supplies and snacks for board and other meetings |  |  |  |  |  |  |  |

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## Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

7. Refer to the Application, Exhibit 11, pages 4-6 of 7. Provide an explanation of the following miscellaneous expenses:

|   | <u>Amount</u> |
|---|---------------|
| (105) VISA - Certificate Frames                                     | \$248.04      |
| (110) Louisville Improvisors- Employee Functions & Recreation       | \$600.00      |
| (113) Science Hill Inn - Employee Functions & Recreation            | \$3,060.00    |
| (124) VISA - Employee Functions & Recreation                        | \$269.07      |
| (130) VISA - Employee Coffee & Supplies                             | \$210.75      |
| (207) Perryville Embroidery LLC - Employee Apparel - Annual Meeting | \$953.21      |
| (209) Backyard Bounce - Miscellaneous                               | \$147.43      |
| (210) Classic Printing, Inc 2 Sided Color Trifold                   | \$2,189.00    |
| (213) VISA - Coffee Maker   | \$816.88      |
| (214) VISA - Coffee Supplies  | \$221.63      |

#### Response 7:

Refer to **Exhibit 3-7**, which is included and made a part of this response, for an explanation of the miscellaneous expenses noted for Exhibit 11 of the Application.

Exhibit 3-7
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### Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

|             | Misc Charges - Application, Exhibit 11 |            |   |   |  |  |  |  |  |  |
|-------------|--|------------|---|---|--|--|--|--|--|--|
| Exh 11 - ID | Check                                  | Amount     | Description   | Explanation   |  |  |  |  |  |  |
| 105         | 63859                                  | \$248.04   | VISA - Certificate Frames                                   | Employee development certificates framed for (6) employees                |  |  |  |  |  |  |
| 110         | 63862                                  | \$600.00   | Louisville Improvisors - Employee Functions & Recreation    | Entertainment for annual employee awards dinner                           |  |  |  |  |  |  |
| 113         | 64221                                  | \$3,060.00 | Science Hill Inn - Employee Functions & Recreation          | Annual employee awards dinner   |  |  |  |  |  |  |
| 124         | 64094                                  | \$267.07   | VISA - Employee Functions & Recreation                      | Program for annual employee awards dinner and postage for invitations     |  |  |  |  |  |  |
| 130         | 64099                                  | \$210.75   | VISA - Employee Coffee & Supplies                           | Coffee and sugar for employee in the break room                           |  |  |  |  |  |  |
| 207         | 65249                                  | \$953.21   | Perryville Embroidery LLC-Employee Apparel - Annual Meeting | Employee shirts for annual meeting  |  |  |  |  |  |  |
| 209         | 65299                                  | \$147.43   | Backyard Bounce - Miscellaneous                             | Popcorn and popcorn machine for annual meeting                            |  |  |  |  |  |  |
| 210         | 65281                                  | \$2,189.00 | Classic Printing, Inc 2 Sided Color Trifold                 | Printing of annual member survey and shipping to insert with member bills |  |  |  |  |  |  |
| 213         | 65422                                  | \$816.88   | VISA - Coffee Maker   | Purchase of commercial coffee maker for employee break room               |  |  |  |  |  |  |
| 214         | 65427                                  | \$221.63   | VISA - Coffee Supplies                                      | Coffe and coffee cups for employee break room                             |  |  |  |  |  |  |

8. Refer to Shelby Energy's application, Exhibit 12. Provide the amount of rate case expenses that have been incurred to date in the format listed in Exhibit 12.

#### Response 8:

Refer to expenses filed for Shelby Energy through February 28, 2017, submitted on March 31, 2017 and received by the Commission on April 3, 2017.

Shelby Energy rate case expenses for March, 2017 were submitted to the Commission on April 26, 2017.

9. Refer to Shelby Energy's response to Staff's Second Request, Items 4 and 21.m., and Revised Exhibit J. Explain why Shelby Energy is proposing a larger percentage rate increase for Schedule B1 than for Schedule B2 when the response to Item 21.m. shows the rate of return for Schedule 81 at current rates is four times greater than that of Schedule B2.

#### Response 9:

The primary item of concern with the Schedule B1 and Schedule B2 was that the demand rates were less than the demand rates billed by East Kentucky Power Cooperative, Inc. ("EKPC") for wholesale power. It was, and is, the desire of Shelby's Board of Directors that demand rates for each of these rate classes have the same demand rates that Shelby Energy is charged by EKPC. The second major concern for these two rate classes is to provide revenue greater than the cost to serve. The third concern is that these two rate classes share in the increase since they did not receive an increase in rates in the last rate case of Shelby Energy. The amount of the rate of return on the rate base was not a concern of Shelby's board.

- 10. Refer to Shelby Energy's response to Staff's Second Request, Item 7.
- a. Refer to Exhibit 2-7b., page 1 of 1. Explain why vegetation management expenses increased from \$789,352 in 2012 to \$2,550,921 in 2016.
- b. Refer to Exhibit 2-7c., page 1 of 1. Explain the increases in the interruption indices from 2012 to 2016 despite the large increases in vegetation management spending.
  - c. Provide the amount of vegetation management expenses in the test year.
- d. Provide the budget for vegetation management expenses for 2017 through 2020 in the format listed in Item 7.b.

#### Response 10a: -

Shelby Energy was unable to establish and maintain a right-of-way ("ROW") cycle and vegetation management plan that was sufficiently controlling vegetation growth for the distribution system based on the previous level of annual expenditures in this area. The weather over the last several years has promoted additional growth in vegetation. Field employees shared that the ROW was over-grown throughout the distribution system which created safety concerns when employees reported they were, frequently, required to clear ROW or request ROW crews to clear vegetation before the restoration of power could begin. An increase in the amount of trees were found to be growing into the lines which created momentary interruptions, "blinks" for members and safety issues for the public. Shelby Energy's management determined the need existed to initiate a more

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consistent method to manage ROW and make a commitment to establishing a 5-year

vegetation management cycle for the future, and with the board of director's support,

began implementation in 2014.

Response 10b:

Shelby Energy provided reliability indices as referenced in the Commission Staff's

Second Request for Information, Exhibit 2-7c., Page 1 of 1, that were the standard indices

for outages which excludes Major Event Days ("MEDS").

MEDS are outages that are out of the normal day-to-day outages. A MED is

usually during a situation that was beyond control and beyond the design and/or

operational limits of a utility (e.g., severe storms). Typically, these outages are excluded

in the reliability indices for normalizing and trending purposes. MEDS use a five-year

average of SAIDI and are calculated using the Institute of Electrical and Electronics

Engineers ("IEEE") Beta Method to determine the MED threshold. If the daily SAIDI

exceeds this threshold it is classified as a MED.

Excluding MEDS from outage calculations for reliability indices doesn't provide the

best picture of what actually takes place in regards to outages that are tree-related or

associated with ROW. Refer to Exhibit 3-10b. At the top of the exhibit are the reliability

indices including MEDS representing all outages for the year. For informational purposes,

the number of MEDS for each year are listed with the data. In addition, other outage

causes that were equal to or greater than 10% of total outages are provided and listed in

descending order in the explanation row.

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Please note in the reliability indices, including MEDS, there is a decline in the percentages of tree-related/ROW outages; from 57% in 2014 to 48% in 2015 and 39% in 2016. The annual reliability indices may not be trending down as much as expected if comparing only dollars spent for vegetation management. However; the reliability indices are influenced by other factors as can be seen by the percentages provided by year resulting from causes at or above 10% along with the remaining percentages from other causes below 10%.

The reliability indices, excluding MEDS, at the bottom of Exhibit 3-10b are provided as an easy reference for comparison between the two sets of data.

#### Response 10c:

Shelby Energy's vegetation management expenses for the test year from August, 2015 through July, 2016 totaled \$2,293,751.

#### Response 10d:

Refer to **Exhibit 3-10d** for Shelby Energy's budget for vegetation management expenses for 2017 through 2020.

Exhibit 3-10b.

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# SHELBY ENERGY COOPERATIVE CASE NO. 20016-00434 RELIABILITY INDICES

| Including Major Event Days         | 2012                 | 2013                      | 2014  | 2015             | 2016               |
|------------------------------------|----------------------|---------------------------|---|------------------|--------------------|
| SAIDI                              | 220.13               | 114.5                     | 477.64                                      | 225.81           | 172.21             |
| SAIFI                              | 1.24                 | 1.13                      | 1.82  | 1.46             | 1.57               |
| CAIDI                              | 177.52               | 101.33                    | 262.44                                      | 154.66           | 109.69             |
| Percentage of Tree-related Outages | 36%                  | 26%                       | 57%   | 48%              | 39%                |
| Other Outage Causes => 10%         | 39%                  | 49%                       | 表的。\$P\$ 10 年度的原则的对应。如果是一个人的。2011年111度全个人的。 | 21%              | 30%                |
| Explanation                        | Lightning, Wind, Ice | Wind, Equip,<br>Lightning |   | Lightning, Equip | Equip. & Lightning |
| Number of Major Event Days         | . 4                  | 0                         | 7   | 6                | 1                  |

| Excluding Major Event Days         | 2012                  | 2013                      | 2014                       | 2015                             | 2016                  |
|------------------------------------|-----------------------|---------------------------|----------------------------|----------------------------------|-----------------------|
| SAIDI                              | 92                    | 114.5                     | 138.68                     | 106.56                           | 157.72                |
| SAIFI                              | 0.94                  | 1.13                      | 1.11                       | 0.99                             | 1.51                  |
| CAIDI                              | 97.87                 | 101.33                    | 124.94                     | 107.64                           | 104.45                |
| Percentage of Tree-related Outages | 29%                   | 26%                       | 14%                        | 24%                              | 35%                   |
| Other Outage Causes => 10%         | 49%                   | 49%                       | 35%                        | 39%                              | 33%                   |
| Explanation:                       | Lightning, Const, Ice | Wind, Equip,<br>Lightning | Equip, Lightning,<br>Const | Equip, Vehicles,<br>Small Animal | Equipment & Lightning |

Exhibit 3-10d.

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Witness: Debra Martin

# SHELBY ENERGY COOPERATIVE, INC. Commission Staff's Third Request for Information Case No. 2016-00434

| Year | ROW<br>Activity | System<br>Section | Number of Miles/Crews | Price per<br>Mile / Crew | Annual<br>Budget |
|------|-----------------|-------------------|-----------------------|--------------------------|------------------|
| 2017 | Cut:            | 1                 | 346                   | \$4,900                  | \$1,695,400      |
| 2011 | 1st Spray:      | 5                 | 346                   | \$290                    | 100,340          |
|      | 2nd Spray:      | 3                 | 330                   | \$290                    | 95,700           |
|      | Ticket crews:   | , <b>J</b>        | 2                     | \$210,000                | 420,000          |
| •    | Ticket ciews.   |                   | 2                     | φ2 10,000                | \$2,311,440      |
|      |                 |                   | _                     |                          |                  |
| 2018 | Cut:            | 2.                | 357                   | \$4,500                  | \$1,606,500      |
|      | 1st Spray:      | `<br>1            | 346                   | \$299                    | 103,350          |
|      | 2nd Spray:      | 4                 | 364                   | \$299                    | 108,727          |
|      | Ticket crews:   |                   | 1.5                   | \$216,300                | <u>324,450</u>   |
|      |                 |                   |                       |                          | \$2,143,027      |
| 2019 | Cut:            | 3                 | 330                   | \$4,200                  | \$1,386,000      |
|      | 1st Spray:      | 2                 | 357                   | \$308                    | 109,835          |
|      | 2nd Spray:      | 5                 | 346                   | \$308                    | 106,450          |
|      | Ticket crews:   |                   | 1                     | \$222,789                | <u>222,789</u>   |
|      |                 |                   |                       |                          | \$1,825,074      |
|      |                 |                   | -                     |                          |                  |
| 2020 | Cut:            | 4                 | 364                   | \$3,800                  | \$1,383,200      |
|      | 1st Spray:      | 3                 | 330                   | · \$317                  | 104,574          |
|      | 2nd Spray:      | 1                 | 346                   | . \$317                  | 109,644          |
|      | Ticket crews:   |                   | 1                     | \$229,473                | <u>229,473</u>   |
|      |                 |                   |                       |                          | \$1,826,891      |

| Row Rotation Cycles          |          |      |      |      |      |  |  |  |  |  |  |  |
|------------------------------|----------|------|------|------|------|--|--|--|--|--|--|--|
| Section:<br>Activity /Yea    | 1<br>ar: | 2    | 3    | 4    | 5    |  |  |  |  |  |  |  |
| Cut 2017 2018 2014 2015 2016 |          |      |      |      |      |  |  |  |  |  |  |  |
| Spray                        | 2018     | 2019 | 2015 | 2016 | 2017 |  |  |  |  |  |  |  |
| Skip                         | 2019     | 2020 | 2016 | 2017 | 2018 |  |  |  |  |  |  |  |
| Spray                        | 2020     | 2021 | 2017 | 2018 | 2019 |  |  |  |  |  |  |  |
| Skip                         | 2021     | 2022 | 2018 | 2019 | 2020 |  |  |  |  |  |  |  |
| Cut                          | 2022     | 2023 | 2019 | 2020 | 2021 |  |  |  |  |  |  |  |

| s         Last Cut         Cut         Last Sprayed         2xt Spray         Zond Spray         Next Cut           2006         2017         2018         2020         2022           2009         2017         2018         2020         2022           2009         2017         2018         2020         2022           2001         2017         2018         2020         2022           2008         2017         2018         2020         2022           2008         2017         2018         2020         2022           2008         2011         2018         2020         2022           2008         2018         2019         2021         2022           2008         2018         2018         2019         2021         2022           2008         2018         2018         2019         2021         2023           2011         2018         2019         2021         2023           2011         2018         2019         2021         2023           2011         2018         2019         2021         2023           2011         2018         2019         2021         2021  |              | tal 1,743 | Grand Total                   | 1       |                 |
|--|--------------|-----------|-------------------------------|---------|-----------------|
| Last Cut   Cut   Last Sprayed   1st Spray   2nd Spra |              | otal 346  | Subtotal                      |         |                 |
| Last Cut   Cut   Last Sprayed   Ist Spray   Znd Spray  |              | 3         | Old Veechdale Rd.             | 1       | Veechdale 15    |
| Last Cut   Cut   Last Sprayed   Ist Spray   2nd Spray  | 2016         | 110       | South Property                | 2       | New Castle 3    |
| Last Cut   Cut   Last Sprayed   Ist Spray   Znd Spray  |              | 72        | Brunerstown/Pound Ln.         | 3       | Logan 1         |
| Last Cut   Cut   Last Sprayed   Ist Spray   2nd Spray  |              | 40        | Old Jericho/Walnut Hills      | 2       | Jericho 11      |
| Last Cut   Cut   Last Sprayed   1st Spray   2015   2006   2017   2018   2020   2020   2009   2017   2018   2020   2020   2017   2018   2020   2020   2017   2018   2020   2020   2011   2017   2018   2020  | -            | e 74      | South Hwy 421/Barebone        | 3       | Bedford 5       |
| Last Cut   Cut   Last Sprayed   1st Spray   2nd Spray  |              | 47        | Mount Pleasant                | 4       | Bedford 5       |
| Last Cut   Cut   Last Sprayed   1st Spray   2nd Spray  |              |           |                               |         | Section (5)     |
| Last Cut   Cut   Last Sprayed   1st Spray   2nd Spray  |              | ital 364  | Subtotal                      |         |                 |
| Last Cut   Cut   Last Sprayed   1st Spray   2nd Spray  |              | . 59      | Joyces Station/Webb Rd.       | 4       | Logan 1         |
| Last Cut   Cut   Last Sprayed   1st Spray   2nd Spray  |              | 94        | Munford/Mound Hill            | 1       | Campbellsburg 4 |
| Last Cut   Cut   Last Sprayed   Last Spray   Znd Spray   |              | 46        | 42/Carlisle                   | 2       | Bedford 5       |
| Last Cut   Cut   Last Sprayed   Ist Spray   Znd Spray  |              | 68        | Kings Rdg./ East Prong        | 1       | Bedford 5       |
| Last Cut   Cut   Last Sprayed   2nd Spray   2nd Spray  |              | 39        | Hwy 146 West                  | 3       | New Castle 3    |
| Last Cut   Last Sprayed   1st Spray   2nd Spray   2006   2017   2018   2020   2009   2017   2018   2020   2009   2017   2018   2020   2009   2017   2018   2020   2019   2011   2011   2018   2020   2020   2020   2021   2022   |              | 58        | Hillsboro                     | 3.      | Campbellsburg 4 |
| Last Cut   Last Sprayed   1st Spray   2nd Spray   2006   2017   2018   2020   2009   2017   2018   2020   2020   2009   2017   2018   2020   |              |           |                               |         | Section (4)     |
| Last Cut   Last Sprayed   1st Spray   2nd Spray   2000   2000   2001   2018   2020 |              | otal 330  | Subtotal                      |         |                 |
| Last Cut   Last Sprayed   1st Spray   2nd Spray   2009   2017   2018   2020   2020   2009   2017   2018   2020   2020   2001   2017   2018   2020   2020   2020   2020   2020   2020   2021   2020   2021   2022 |              | 54        | Beard                         | 2       | Clayvillage 2   |
| Last Cut   Cut   Last Sprayed   1st Spray   2nd Spray  |              | 32        | Long Run / Aiken Rd.          | 1 and 2 | Long Run 13     |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2019         2021           2008         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019   |              | 98        | Maddox Rdg.                   | 2       | Campbellsburg 4 |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2019         2021           2008         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2010         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019   |              | 56        | Pendleton North               | 1       | Jericho 11      |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2019         2021           2008         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2010         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019   |              | 35        | Hempridge                     | 4       | Clayvillage 2   |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2019         2021           2008         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2010         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019   |              | 55        | Southville Pike               | 3       | Southville 6    |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2001         2011         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2019         2021           2008         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2010         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019   |              |           |                               |         | Section (3)     |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2019         2021           2008         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2010         2018         2019         2021           2011         2018         2019   |              | otal 357  | Subtotal                      |         |                 |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2001         2011         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2019         2021           2008         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2010         2018         2019         2021           2010         2018         2019   |              | 5         |                               | all     | Industrial Park |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2019         2021           2018         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2010         2018         2019         2021           2010         2018         2019         2021           2010         2018         2019   |              | 39        | Pea Ridge                     | 2       | Southville 6    |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2019         2021           2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021           2012         2019         2021         2021           2019         2021         2021         2021           2010         2018         2019         2021   |              | 20        | Logan/Finchville              | 2       | Logan 1         |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2018         2020         2018         2020           2019         2021         2021         2021           2018         2019         2021         2021           2011         2018         2019         2021           2011         2018         2019         2021           2018         2019         2021         2021           2018         2019         2021         2021           2008         2018         2019   |              | 44        | South Lake Jericho            | 3       | Jericho 11      |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2018         2020         2018         2020           2019         2021         2021         2021           2018         2019         2021         2021           2011         2018         2019         2021           2011         2018         2019         2021           2011         2018         2019         2021  |              | 9         | Benson West                   | 5       | Clayvillage 2   |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2020         2018           2008         2018         2019         2021           2008         2018         2019         2021           2018         2019         2021           2011         2018         2019         2021   |              | 84        | Rockbridge                    | 1       | Southville 6    |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2018         2020         2018         2020           2008         2018         2019         2021         2021           2008         2018         2019         2021         2021   |              | 83        | Ardmore/Brassfield            | 1       | Logan 10        |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020  |              |           | State Police                  | 4       | Campbellsburg 4 |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2018         2020         2018         2020  |              | 2) 30     | Ditto (60 mile total cut 1/2) | 1       | New Castle 3    |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020  |              |           |                               |         | Section (2)     |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020           2008         2017         2018         2020           2018         2020         2018         2020  |              | otal 346  | Subtotal                      |         |                 |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020           2008         2017         2018         2020  |              |           | Ditto (60 mile total cut 1/2) | 1       | New Castle 3    |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2011         2017         2018         2020  |              | 59        | Vigo/Clear Creek              | 1       | Clayvillage 2   |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020  |              | 22        | Pecks Pike                    | 3       | Milton 7        |
| Last Cut         Cut         Last Sprayed         1st Spray         2nd Spray           2006         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020           2009         2017         2018         2020  |              | 3         | Moffet Rd.                    | 1       | Milton 7        |
| Last Cut   |              |           | South 421/Milton-Bedford      | 2       | Milton 7        |
| Last Cut   |              | 31        | Liberty Ridge                 | 4       | Milton 7        |
| Last Cut Cut Last Sprayed 1st Spray 2nd Spray  | 2006         | 148       | Benson East                   | 3       | Clayvillage 2   |
| Last Cut Cut Last Sprayed 1st Spray 2nd Spray  |              |           |                               |         | Section (1)     |
|  | Last Cut Cut | Miles     | r Name                        | Feeder  | Substation      |

5 YEAR SEC RIGHT OF WAY PLAN

Exhibt 3-10d.
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Witness: Debra Martin

Question 11
Page 1 of 1
Witness: Debra Martin

# Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

11. Refer to Shelby Energy's response to Staffs Second Request, Item 12. State whether Shelby Energy prorates the customer charge when a customer has less than a full month of service.

### Response 11:

Shelby does not prorate the customer charge for less than a full month of service.

Witness: James Adkins

# Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

12. Refer to Shelby Energy's response to Staffs Second Request, Item 13.c.(2). Provide revised Exhibit J using a multiplier of 365 days times the daily rate rather than 360.

### Response 12:

Refer to the attached Second Revised Schedule J, **Exhibit 3-12**, for the requested change to the number of days in a year applicable to a daily rate charge for the Prepay Program Service Fee.

Refer to **USB Drive (D)** for an electronic version of the Second Revised Schedule J, labeled **Exhibit 3-12**.

Exhibit 3-12
Second Revised Exhibit J
Page 1 of 10
Witness: James Adkins

| 6        |                                     |               |                | Percent      | Normalized   | Percent      |              | Percent      |             |                | Incre         | ase            |               |                | Total        | Increase |
|----------|-------------------------------------|---------------|----------------|--------------|--------------|--------------|--------------|--------------|-------------|----------------|---------------|----------------|---------------|----------------|--------------|----------|
| 7        | Rate                                | Kwh           | Test Year      | of           | Case No.     | of           | Proposed     | of           | Phas        | <u>e 1</u>     | Phas          | e 2            | Phas          | e 3            | Increase     | Percent  |
| 8<br>9   | <u>Schedule</u>                     | <u>Useage</u> | <u>Revenue</u> | <u>Total</u> | 2010-00509   | <u>Total</u> | Revenue      | <u>Total</u> | Amount      | <u>Percent</u> | <u>Amount</u> | <u>Percent</u> | <u>Amount</u> | <u>Percent</u> | Amount       | of Total |
| 10       | Rate 12, Residential Service        | 195,123,986   | \$18,770,477   | 47%          | \$18,770,477 | 47%          | \$19,445,437 | 47%          | \$674,960   | 3.6%           | \$238,810     | 1.3%           | \$236,859     | 1.3%           | \$1,150,630  | 57.7%    |
| 11       | Off Peak Marketing Rate (ETS)       | 253,124       | 15,486         | 0%           | 15,486       | 0%           | 15,734       | 0%           | 248         | 1.6%           | 81            | 0.5%           | 84            | 0.5%           | 413          | 0.0%     |
| 12       | Rate 15, Prepay Service             | 9,471,107     | 912,928        | 2%           | 912,928      | 2%           | 967,970      | 2%           | 55,042      | 6.0%           | 11,928        | 1.3%           | 11,616        | 1.3%           | 78,586       | 3.9%     |
| 13       | Rate 11, General Service            | 31,793,552    | 3,429,381      | 9%           | 3,429,381    | 9%           | 3,601,560    | 9%           | 172,179     | 5.0%           | 57,439        | 1.7%           | 57,370        | 1.7%           | 286,989      | 14.4%    |
| 14       | Rate 2, Large Power                 | 52,584,285    | 4,178,722      | 10%          | 4,178,722    | 10%          | 4,219,127    | 10%          | 40,404      | 1.0%           | 41,551        | 1.0%           | 39,884        | 1.0%           | 121,840      | 6.1%     |
| 15       | Rate B1, Large Industrial Rate      | 126,170,360   | 8,511,553      | 21%          | 8,511,553    | 21%          | 8,592,816    | 21%          | 81,263      | 1.0%           | 85,364        | 1.0%           | 85,115        | 1.0%           | 251,743      | 12.6%    |
| 16       | Rate B2, Large Industrial Rate      | 63,560,133    | 3,610,886      | 9%           | 3,610,886    | 9%           | 3,646,927    | 9%           | 36,041      | 1.0%           | 11,915        | 0.3%           | 12,551        | 0.3%           | 60,507       | 3.0%     |
| 17       | Rate 5, Outdoor and Street Lighting | 2,450,356     | 536,355        | 1%           | 536,355      | 1%           | 561,188      | 1%           | 24,833      | 4.6%           | 9,356         | 1.7%           | 8,125         | 1.5%           | . 42,314     | 2.1%     |
| 18       | Envirowatts                         | 131,500       | 3,616          | 0%           | 3,616        | . 0%         | 3,616        | 0%           | 0           | 0.0%           | 0             | 0.0%           | 0             | 0.0%           | -            | 0.0%     |
| 19       | Rounding differences                |               |                |              |              | •            | .0           |              | 0           |                | 0             |                | 0             |                | 0            |          |
| 20<br>21 | Total from base rates               | 481,538,403   | 39,969,403     | 100%         | \$39,969,404 | 100%         | \$41,054,374 | 100%         | \$1,084,971 | 2.7%           | \$456,446     | 1.1%           | \$451,604     | 1.1%           | \$ 1,993,021 | 100.0%   |
| 22       | Fuel adjustment billed              |               | (2,016,170)    |              | •            |              |              |              |             |                | -             |                |               |                |              |          |
| 23       | Environmental surcharge billed      |               | 4,779,689      | •            |              |              |              |              |             |                |               |                |               |                |              |          |
| 24       | Revenue per General Ledger          | :             | \$42,732,923   |              |              |              |              |              |             |                |               |                |               |                |              |          |
| 25       |                                     |               |                | Increase     | <u>\$0</u>   |              | \$1,084,971  |              |             |                |               |                |               |                |              |          |
| 26       |                                     |               |                |              | 0.00%        |              | 2.71%        |              | •           | -              |               |                | • .           |                |              |          |

### Exhibit 3-12 Second Revised Exhibit J Page 2 of 10

Witness: James Adkins

### Residential Service - Rate 12

|   |              | Test   | Norn      | nalized   | Ph        | nase 1  | Ph        | ase 2   | Pl        | nase 3  |
|---|--------------|--|-----------|---|-----------|---|-----------|---|-----------|---|
|   | Billing      | Year   | 2010      | -00509  | Pro       | posed   | Pro       | posed   | Pro       | posed   |
| <u>Description</u>  | Determinants | Revenues   | Rates     | Revenues  | Rates     | Revenues  | Rates     | Revenues  | Rates     | Revenues  |
|   |              |  |           |   |           |   |           |   |           | <del></del>   |
| Consumer Facility Charge  | 145,617      | \$1,476,556  | \$10.14   | \$1,476,556                                       | \$13.06   | \$1,901,758   | \$14.03   | \$2,043,007   | \$15.00   | \$2,184,255   |
| Energy charge per kWh   | 195,123,986  | 17,289,936   | \$0.08861 | 17,289,936  | \$0.08989 | 17,539,695  | \$0.09039 | 17,637,257  | \$0.09088 | 17;732,868  |
| Difference to partials .  | _            | 3,984  | _         | 3,984   | _         | 3,984   | _         | 3,984   |           | 3,984   |
|   |              |  |           |   | _         | -   | _         | _   |           |   |
| Total from base rates   |              | 18,770,477   |           | \$18,770,477                                      | _         | \$19,445,437  | _         | \$19,684,248  |           | \$19,921,107  |
|   |              |  | -         |   | _         |   | _         |   | •         |   |
| Fuel adjustment   |              | (817,558)  |           |   |           |   |           |   |           | •   |
| Environmental surcharge   | _            | 2,328,108  |           | •   | •         |   |           |   |           | •   |
|   |              |  |           |   |           |   |           |   |           |   |
| Total revenues  |              | \$20,281,027   |           |   |           |   |           |   |           |   |
|   | •            |  |           |   |           |   |           |   | •         |   |
| Amount  |              |  |           | \$0   | •         | \$674,960   |           | \$238,810   |           | \$236,859   |
| Percent   |              |  |           | 0.0%  |           | 3.6%  |           | 1.2%  |           | 1.2%  |
|   |              |  |           |   |           |   |           |   |           |   |
| Average monthly bili  | 1,340        | \$128.90   |           | \$128.90  |           | \$133.54  |           | \$135.18  |           | \$136.80  |
| Amount  |              |  |           | \$0.00  |           | \$4.64  |           | \$1.64  |           | \$1.63  |
| Percent   |              |  |           | 0.0%  |           | 3.6%  |           | 1.2%  |           | 1.2%  |
| Total from base rates  Fuel adjustment Environmental surcharge  Total revenues  Amount Percent  Average monthly bill Amount |              | 18,770,477<br>(817,558)<br>2,328,108<br>\$20,281,027 |           | \$18,770,477<br>\$0<br>0.0%<br>\$128.90<br>\$0.00 | =         | \$19,445,437<br>\$674,960<br>3.6%<br>\$133.54<br>\$4.64 | =         | \$19,684,248<br>\$238,810<br>1.2%<br>\$135.18<br>\$1.64 | •         | \$19,921,107<br>\$236,859<br>1.2%<br>\$136.80<br>\$1.63 |

### Exhibit 3-12 Second Revised Exhibit J Page 3 of 10

Witness: James Adkins

### Off-Peak Retail Marketing Rate (ETS)

| ·   |                | Test           | Normalized |                           | Phase 1   |                           | Phase 2     |                           | P)        | hase 3                    |
|---|----------------|----------------|------------|---------------------------|-----------|---------------------------|-------------|---------------------------|-----------|---------------------------|
|   | Billing        | Year           | . 2010     | 0-00509                   | Pro       | oposed                    | Pro         | posed                     | Pro       | oposed                    |
| <u>Description</u>                                | Determinants   | Revenues       | Rates      | Revenues                  | Rates     | Revenues                  | Rates       | Revenues                  | Rates     | Revenues                  |
| Consumer Facility Charge<br>Energy charge per kWh | 667<br>253,124 | 15,486         | \$0.06118  | . 15,486_                 | \$0.06216 | 15,734                    | \$0.06248 _ | 15,815                    | \$0.06281 | 15,899                    |
| Total from base rates                             |                | 15,486         | ;          | \$15,486                  |           | \$15,734                  | =           | \$15,815                  | :         | \$15,899                  |
| Fuel adjustment<br>Environmental surcharge        |                | (936)<br>1,888 |            |                           |           |                           |             |                           |           | ,                         |
| Total revenues                                    | :              | \$16,438       |            |                           |           |                           |             |                           |           |                           |
| Amount<br>Percent                                 |                |                |            | \$0<br>0.0%               |           | \$248<br>1.6%             |             | \$81<br>0.5%              |           | \$84<br>0.5%              |
| Average monthly bill<br>Amount<br>Percent         | 379            | \$23.22        |            | \$23.22<br>\$0.00<br>0.0% |           | \$23.59<br>\$0.37<br>1.6% |             | \$23.71<br>\$0.12<br>0.5% |           | \$23.84<br>\$0.13<br>0.5% |

Exhibit 3-12
Second Revised Exhibit J
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Witness: James Adkins

### Prepay Service - Rate 15

|                                    |              | Test      | Norn      | nalized   | Pl        | nase 1    | Ph        | ase 2                                 | · Pł      | nase 3    |
|------------------------------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------------------|-----------|-----------|
| •                                  | Billing      | Year      | . 2010    | -00509    | Pro       | posed '   | Pro       | posed                                 | Pro       | posed     |
| <u>Description</u>                 | Determinants | Revenues  | Rates     | Revenues  | Rates     | Revenues  | Rates     | Revenues                              | Rates     | Revenues  |
|                                    |              |           | _         |           |           |           |           | · · · · · · · · · · · · · · · · · · · |           |           |
| Consumer Facility Charge (per day) | 7,166        | \$51,896  | \$0.338   | \$51,896  | \$0.4350  | \$94,815  | \$0.4680  | \$102,008                             | \$0.5000  | \$108,983 |
| Energy charge per kWh              | 9,471,107    | 839,235   | \$0.08861 | 839,235   | \$0.08989 | 851,358   | \$0.09039 | 856,093                               | \$0.09088 | 860,734   |
| Prepay Service Fee (per day)       | 7,166        | 21,797    | \$0.100   | 21,797    | \$0.100   | 21,797    | \$0.100   | 21,797                                | \$0.100   | 21,797    |
| Number of customers                | 597.17       |           | _         |           | •         |           | _         |                                       | -         |           |
|                                    | •            |           |           |           |           |           |           |                                       |           |           |
| Total from base rates              |              | 912,928   |           | \$912,928 |           | \$967,970 |           | \$979,898                             |           | \$991,514 |
|                                    |              |           | -         |           | -         |           | =         |                                       | -         |           |
| Fuel adjustment                    |              | (43,891)  |           |           |           |           |           |                                       |           |           |
| Environmental surcharge            |              | 113,313   |           |           |           |           |           |                                       |           |           |
|                                    | -            |           |           |           |           |           |           |                                       |           |           |
| Total revenues                     |              | \$982,350 |           |           |           |           |           |                                       |           |           |
| ·                                  | -            |           |           |           |           |           |           | •                                     |           |           |
| Amount ·                           |              |           |           | (\$0)     |           | \$55,042  |           | \$11,928                              |           | \$11,616  |
| Percent                            |              |           |           | 0.0%      |           | 6.0%      |           | 1.2%                                  |           | 1.2%      |
|                                    |              |           |           |           |           |           |           |                                       |           |           |
| Average monthly bill               | 1,322        | \$127.40  |           | \$127.40  |           | \$135.08  | •         | \$136.74                              |           | \$138.36  |
| Amount                             | •            | •         |           | (\$0.00)  |           | \$7.68    |           | \$1.66                                |           | \$1.62    |
| Percent                            |              |           |           | 0.0%      |           | 6.0%      |           | 1.2%                                  |           | 1.2%      |
|                                    |              |           |           | 5.5.5     |           | 0.0,0     |           | 1.270                                 |           | 1.270     |

Exhibit 3-12 Second Revised Exhibit J

Page 5 of 10 Witness: James Adkins

### General Service - Rate 11

|                                      |              | Test        | Norr      | nalized     | Phase 1 Phase 2 |             | nase 2    | Phase 3     |           |             |
|--------------------------------------|--------------|-------------|-----------|-------------|-----------------|-------------|-----------|-------------|-----------|-------------|
| •                                    | Billing      | Year        | 2010      | -00509      | Pro             | oposed      | . Pro     | posed       | Pro       | oposed      |
| <u>Description</u>                   | Determinants | Revenues    | Rates     | Revenues    | Ratés           | Revenues    | Rates     | Revenues    | Rates     | Revenues    |
|                                      |              |             |           |             |                 |             |           |             |           |             |
| Consumer Facility Charge             |              |             |           | . ~         |                 |             |           |             |           |             |
| Single phase                         | 35,906       | \$467,855   | \$13.03   | \$467,855   | \$16.01         | \$574,855   | \$17.01   | \$610,761   | \$18.00   | \$646,308   |
| Three phase                          | 2,778        | 94,119      | \$33.88   | 94,119      | \$37.55         | 104,314     | \$38.78   | . 107,731   | \$40.00   | 111,120     |
| Demand charge (contract)             | 0            | 0           | \$5.17    | . 0         | \$5.17          | 0           | \$5.17    | 0           | \$5.17    | 0           |
| Energy charge per kWh                | 31,793,552   | 2,867,778   | \$0.09020 | 2,867,778   | \$0.09193       | 2,922,781   | \$0.09250 | 2,940,904   | \$0.09308 | 2,959,344   |
| Primary metering discount 5% Rate 23 | , _          | (371)       |           | (371)       |                 | (390)       | _         | (396)       | _         | (402)       |
|                                      |              |             |           |             |                 |             | _         |             |           |             |
| Total from base rates                | •            | \$3,429,381 |           | \$3,429,381 |                 | \$3,601,560 | _         | \$3,658,999 | _         | \$3,716,370 |
|                                      |              |             | •         |             | •               |             | -         |             | •         |             |
| Fuel adjustment                      |              | (135,228)   |           |             |                 |             |           |             |           |             |
| Environmental surcharge              |              | 424,585     |           | •           |                 |             |           | •           |           |             |
| J                                    | -            |             |           |             |                 |             |           |             | •         |             |
| Total revenues                       |              | \$3,718,738 |           |             |                 |             |           |             |           |             |
|                                      | -            |             |           | •           |                 |             |           |             |           |             |
| Amount                               |              |             |           | \$0         |                 | \$172,179   |           | \$57,439    |           | \$57,370    |
| Percent                              |              |             |           | 0.0%        |                 | 5.0%        |           | 1.6%        | •         | 1.6%        |
| 1 disant                             |              |             |           |             |                 | •           |           |             |           |             |
| Average monthly bill                 | 822          | \$95.51     |           | \$95.51     | •               | \$100.31    |           | \$101.90    |           | \$103.50    |
| Amount                               |              | F           |           | \$0.00      |                 | \$4.80      |           | \$1.60      |           | \$1.60      |
| Percent                              |              |             |           | 0.0%        |                 | 5.0%        |           | 1.6%        |           | 1.6%        |
| reiteit                              |              |             |           | 0.070       |                 | 5,070       |           | 1.070       |           | 1.070       |

## Exhibit 3-12 Second Revised Exhibit J

econd Revised Exhibit J Page 6 of 10

Witness: James Adkins

### Large Power Service - Rate 2

| ·                                    |              | Test        | Norm      | nalized     | Ph        | ase 1       | Ph        | nase 2      | Ph        | ase 3        |
|--------------------------------------|--------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|--------------|
|                                      | Billing      | Year        | 2010      | -00509      | Pro       | posed       | Pro       | posed       | Pro       | posed        |
| <u>Description</u>                   | Determinants | Revenues    | Rates     | Revenues    | Rates     | Revenues    | Rates     | Revenues    | Rates     | Revenues     |
|                                      |              |             |           |             |           |             |           | •           |           |              |
| Consumer Facility Charge             | . 636        | \$33,186    | \$52.18   | 33,186      | \$58.06   | \$36,926    | \$64.12   | \$40,780    | \$70.00   | \$44,520     |
| Demand charge                        | 157,131      | 812,367     | \$5.17    | 812,367     | \$5.46    | 857,935     | \$5.76    | 905,075     | \$6.05    | 950,643      |
| Interruptible Credit \$4.90 - Rate 5 | 0            | 0           | (\$4.90)  | 0           | (\$4.90)  | 0           | (\$4.90)  | 0           | (\$4.90)  | 0            |
| Energy charge per kWh                | 52,584,285   | 3,383,799   | \$0.06435 | 3,383,799   | \$0.06419 | 3,375,385   | \$0.06402 | 3,366,446   | \$0.06385 | 3,357,507    |
|                                      |              | ,           |           | •           |           |             |           |             |           | •            |
| Primary meter discount 5% - Rate 32  |              | (50,630)    | _         | (50,630)    | _         | (51,120)    |           | (51,623)    |           | (52,107)     |
| •                                    |              |             |           |             | •         |             |           |             |           | _            |
| Total from base rates                |              | 4,178,722   | _         | \$4,178,722 | _         | \$4,219,127 | _         | \$4,260,678 | _         | \$4,300,562  |
| ,                                    | •            |             |           |             |           | ,           |           |             |           | <del>-</del> |
| Fuel adjustment                      |              | (220,288)   |           |             |           |             |           |             |           |              |
| Environmental surcharge              |              | 495,351     |           |             |           |             |           |             |           |              |
|                                      |              |             |           | •           |           |             |           |             |           |              |
| Total revenues                       |              | \$4,453,785 |           |             |           |             |           |             |           |              |
| •                                    | •            |             |           |             |           |             |           | ÷           |           |              |
| Amount                               |              |             |           | \$0         |           | \$40,404    |           | \$41,551    |           | \$39,884     |
| Percent                              | •            |             |           | 0.0%        |           | 1.0%        |           | 1.0%        |           | 0.9%         |
|                                      |              |             |           |             | -         |             |           |             |           |              |
| Average monthly bill                 | 82,680       | \$6,570.32  |           | \$6,570.32  |           | \$6,633.85  |           | \$6,699.18  |           | \$6,761.89   |
| Amount                               |              |             |           | \$0.00      |           | \$63.53     |           | \$65.33     |           | \$62.71      |
| Percent                              |              |             |           | 0.0%        |           | 1.0%        |           | 1.0%        |           | 0.9%         |
|                                      |              |             |           |             |           | •           |           |             |           |              |

Exhibit 3-12 Second Revised Exhibit J

Page 7 of 10 Witness: James Adkins

### Large Industrial Rate - Schedule B1

| •                                   |              | Test               | Norr      | nalized     | Ph        | ase 1              | ΡÌ        | hase 2      | Pł        | nase 3      |
|-------------------------------------|--------------|--------------------|-----------|-------------|-----------|--------------------|-----------|-------------|-----------|-------------|
| ·                                   | Billing      | Year               | 2010      | -00509      | Pro       | posed              | Pro       | oposed      | Pro       | posed       |
| <u>Description</u>                  | Determinants | Revenues           | Rates     | Revenues    | Rates     | Revenues           | Rates     | Revenues    | Rates     | Revenues .  |
|                                     |              |                    |           |             | •         |                    |           |             |           |             |
| Consumer Facility Charge            | 167          | \$102,585          | \$614.28  | \$102,585   | \$614.28  | <b>\$102,585</b> . | \$614.28  | \$102,585   | \$614.28  | \$102,585   |
| Demand Charge                       | •            |                    |           |             |           | •                  |           |             |           |             |
| Contract Demand .                   | 240,100      | 1,483,818          | \$6.18    | 1,483,818   | \$6.51    | 1,563,051          | \$6.84    | 1,642,284   | \$7.17    | 1,721,517   |
| Excess of contract Demand           | 25,252       | 226,763            | \$8.98    | 226,763     | \$9.31    | 235,096            | \$9.65    | 243,682     | \$9.98    | 252,015     |
| Energy charge                       | 126,170,360  | 6,606,280          | \$0.05236 | 6,606,280   | \$0.05232 | 6,601,233          | \$0.05231 | 6,599,972   | \$0.05230 | 6,598,710   |
| Energy charge, contract minimum     | 3,955,428    | 207,106            | \$0.05236 | 207,106     | \$0.05232 | 206,948            | \$0.05231 | 206,908     | \$0.05230 | 206,869     |
|                                     |              |                    |           |             |           |                    |           |             |           |             |
| Primary meter discount 5% - Rate 38 | _            | (114,9 <u>9</u> 9) | _         | (114,999)   |           | (116,097)          | _         | (117,250)   | _         | (118,400)   |
|                                     |              |                    |           |             |           |                    |           |             |           |             |
| Total from base rates               |              | 8,511,553          |           | \$8,511,553 |           | \$8,592,816        | =         | \$8,678,181 | _         | \$8,763,295 |
|                                     |              |                    |           |             |           |                    | •         |             | _         | _           |
| Fuel adjustment                     |              | (534,455)          |           |             |           |                    |           |             |           |             |
| Environmental surcharge             | _            | 994,045            |           |             |           | •                  |           |             |           |             |
| •                                   |              |                    |           |             |           |                    |           |             | •         | •           |
| Total revenues                      | •            | \$8,971,143        |           |             | •         |                    |           |             |           |             |
|                                     | •            | -                  |           |             |           |                    |           |             |           |             |
| Amount                              | •            |                    |           | \$0         |           | \$81,263           |           | \$85,364    |           | \$85,115    |
| Percent                             |              |                    |           | 0.0%        |           | 1.0%               | •         | . 1.0%      |           | 1.0%        |
|                                     |              |                    |           |             | •         |                    |           |             |           |             |
| Average monthly bill                | 779,196      | \$50,967.38        |           | \$50,967.38 |           | \$51,453.99        | •         | \$51,965.15 |           | \$52,474.82 |
| Amount                              |              |                    |           | \$0.00      |           | \$486.61           |           | \$511.16    |           | \$509.67    |
| Percent                             |              |                    |           | 0.0%        |           | 1.0%               |           | 1.0%        |           | 1.0%        |
|                                     |              |                    |           |             |           |                    |           |             |           |             |

Exhibit 3-12 Second Revised Exhibit J Page 8 of 10 Witness: James Adkins

### Large Industrial Rate - Schedule B2

|                           | ļ            | Test         | · Norr     | malized      | Pł         | nase 1       | Ph          | ase 2        | Ph         | nase 3       |
|---------------------------|--------------|--------------|------------|--------------|------------|--------------|-------------|--------------|------------|--------------|
|                           | Billing      | Year         | 2010       | -00509       | Pro        | posed        | Pro         | posed        | Pro        | posed        |
| <u>Description</u>        | Determinants | Revenues     | Rates      | Revenues     | Rates      | Revenues     | Rates       | Revenues     | Rates      | Reveņues     |
|                           |              |              |            |              | •          |              |             | -            |            |              |
| Consumer Facility Charge  | 12           | \$14,729     | \$1,227.41 | \$14,729     | \$1,227.41 | \$14,729     | \$1,227.41  | \$14,729     | \$1,227.41 | \$14,729     |
| Demand Charge             |              |              |            |              |            |              |             |              |            |              |
| Contract Demand           | 97,500       | 602,550      | \$6.18     | 602,550      | \$6.77     | 660,075      | \$6.97      | 679,575      | \$7.17     | 699,075      |
| Excess of contract Demand | 3,389        | 30,433       | \$8.98     | 30,433       | \$9.58     | 32,467       | \$9.78      | 33,144       | \$9.98     | 33,822       |
| Energy charge             | 63,560,133   | 2,963,173    | \$0.04662  | 2,963,173    | \$0.04625  | 2,939,656    | \$0.04612 _ | 2,931,393    | \$0.04600  | 2,923,766    |
|                           |              |              |            |              |            |              |             |              | _          |              |
| Total from base rates     |              | 3,610,886    | :          | \$3,610,886  | _          | \$3,646,927  | _           | \$3,658,842  | _          | \$3,671,392  |
|                           | •            | •            |            |              |            |              | _           |              | _          |              |
| Fuel adjustment           |              | (263,048)    |            |              |            |              |             |              |            |              |
| Environmental surcharge   | _            | 417,184      |            |              |            |              |             |              |            |              |
|                           | •            |              |            |              |            |              |             |              |            |              |
| Total revenues            | ·<br>=       | \$3,765,021  |            |              |            |              |             |              |            |              |
|                           |              |              |            |              |            |              |             |              |            |              |
| Amount                    |              |              |            | \$0          |            | \$36,041     |             | \$11,915     |            | \$12,551     |
| Percent                   |              |              | •          | 0.0%         |            | 1.0%         |             | 0.3%         |            | 0.3%         |
|                           |              |              |            |              |            |              |             |              |            |              |
| Average monthly bill      | 5,296,678    | \$300,907.13 | •          | \$300,907.13 |            | \$303,910.56 |             | \$304,903.47 |            | \$305,949.35 |
| Amount                    |              |              |            | \$0.00       | •          | \$3,003.43   |             | \$992.92     |            | \$1,045.88   |
| Percent                   |              |              |            | 0.0%         |            | 1.0%         |             | 0.3%         |            | 0.3%         |

Exhibit 3-12 Second Revised Exhibit J

Page 9 of 10

Witness: James Adkins

### Outdoor and Street Lighting Service - Rate 3 and 3L (LED)

|                                    |              | Test      | Norm    | nalized   | Ph      | ase 1 .   | Ph      | iase 2    | Pi      | nase 3    |
|------------------------------------|--------------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
|                                    | Billing      | Year      | 2010-   | -00509    | Pro     | posed     | Pro     | posed     | Pro     | pposed    |
| <u>Description</u>                 | Determinants | Revenues  | Rates   | Revenues  | Rates   | Revenues  | Rates   | Revenues  | Rates   | Revenues  |
|                                    |              |           |         |           |         |           |         |           |         |           |
| Rate 3:                            |              |           |         |           |         |           | •       |           |         |           |
| 100 Watt HPS Security Light        | 41,041       | \$387,017 | \$9.43  | \$387,017 | \$9.86  | \$404,664 | \$10.03 | \$411,641 | \$10.17 | \$417,387 |
| 100 Watt Decorative Colonial Light | 2,055        | 26,057    | \$12.68 | 26,057    | \$13.29 | 27,311    | \$13.49 | 27,722    | \$13.69 | 28,133    |
| 400 Watt Directional Flood Light   | 2,038        | 39,109    | \$19.19 | 39,109    | \$20.11 | 40,984    | \$20.42 | 41,616    | \$20.73 | · 42,248  |
| 250 Watt Directional Flood Light   | 4,590        | 63,709    | \$13.88 | 63,709    | \$14.55 | 66,785    | \$14.77 | 67,794    | \$14.99 | 68,804    |
| 150 Watt Decorative Acorn          | 207          | . 3,136   | \$15.15 | 3,136     | \$15.88 | 3,287     | \$16.12 | 3,337     | \$16.36 | 3,387     |
| •                                  |              |           |         |           | •       |           |         |           |         |           |
| Rate 3L:                           |              |           |         |           |         |           |         |           |         |           |
| Standard                           | 1,224        | 12,264    | \$10.02 | 12,264    | \$10.50 | 12,852    | \$10.66 | 13,048    | \$10.82 | 13,244    |
| Decorative Colonial                | 170          | 2,118     | \$12.46 | 2,118     | \$13.06 | 2,220     | \$13.26 | 2,254     | \$13.46 | 2,288     |
| Cobra Head                         | 4            | 55        | \$13.63 | 55        | \$14.28 | . 57      | \$14.50 | 58        | \$14.72 | . 59      |
| Directional Flood Light            | 155          | 2,889     | \$18.64 | 2,889     | \$19.53 | 3,027     | \$19.83 | 3,074     | \$20.13 | 3,120     |
|                                    |              |           |         |           |         |           |         |           |         | ŕ         |
| kWh .                              | 2,450,356    |           |         |           |         |           |         |           |         |           |
|                                    |              |           |         | 0         |         | 0         |         | 0         |         | 0         |
|                                    | •            |           | _       |           | -       |           | _       |           | -       |           |
| Total from base rates              |              | 536,355   |         | \$536,355 |         | \$561,188 |         | \$570,544 |         | \$578,669 |
|                                    |              |           | . =     |           | . =     |           | =       |           | =       |           |
| Fuel adjustment                    |              | (766)     | •       |           |         |           |         | -         |         |           |
| Environmental surcharge            |              | 5,215     |         | •         |         |           |         |           |         |           |
|                                    | -            |           | •       |           |         |           |         |           |         |           |
| Total revenues                     |              | \$540,804 |         |           |         |           |         |           |         |           |
|                                    | =            |           |         |           |         |           |         |           |         |           |
| Amount                             |              |           | •       | \$0       |         | \$24,833  |         | \$9,356   |         | \$8,125   |
| Percent                            |              |           |         | 0.0%      |         | 4.6%      |         | 1.7%      |         | 1.4%      |
| reitent                            |              | •         | •       | 0.070     |         | 4.076     |         | 1.770     |         | 1.4%      |
| Average monthly bill               | 48           | \$10.42   |         | \$10.42   | -       | \$10.90   |         | \$11.08   |         | \$11.24   |
| ·Amount                            | 40           | 910.7Z    |         | \$0.00    |         | \$0.48    |         | \$0.18    |         | \$11.24   |
| Percent                            |              |           |         | 0.0%      |         | 4.6%      |         | 1.7%      |         |           |
| rercent                            |              |           |         | 0.070     |         | 4.0%      |         | 1.770     |         | 1.4%      |

Exhibit 3-12 Second Revised Exhibit J

Page 10 of 10 Witness: James Adkins

### Envirowatts

|  |              | Test     | Norn      | nalized     | Ph        | nase 1      | Pl        | hase 2      | Pi        | hase 3      |
|--|--------------|----------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
| •  | Billing      | Year     | 2010      | -00509      | Proposed  |             | Proposed  |             | Proposed  |             |
| <u>Description</u>                         | Determinants | Revenues | Rates     | Revenues    | Rates     | Revenues    | Rates     | Revenues    | Rates     | Revenues    |
| Envirowatts<br>kWh                         | 131,500      | 3,616    | \$0.02750 | 3,616<br>   | \$0.02750 | 3,616       | \$0.02750 | 3,616       | \$0.02750 | 3,616       |
| Billing Correction adjustments             |              |          |           |             | -         |             |           |             |           |             |
| Total from base rates                      |              | 3,616    |           | \$3,616     | · =       | \$3,616     |           | \$3,616     | :         | \$3,616     |
| Fuel adjustment<br>Environmental surcharge |              |          |           |             |           |             |           |             |           |             |
| Total revenues                             | :            | \$3,616  |           |             | •         |             | •         |             |           |             |
| Amount<br>Percent                          | . •          |          |           | \$0<br>0.0% |           | \$0<br>0.0% |           | \$0<br>0.0% |           | \$0<br>0.0% |

Witness: James Adkins

# Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

13. Refer to Shelby Energy's response to Staff's Second Request, Items 14-16. Provide the supporting calculation of the primary metering discount for each phase increase for Rate Schedules 11, 2, and B 1.

### Response 13:

Refer to **Exhibit 3-13** of this response which provides the supporting calculations for the determination of the proposed primary discount. The supporting set of calculations provides updated information that represents a change in revenue requirements by \$454. The amounts by rate class are provided in the exhibit.

### Shelby Energy Cooperative Case No. 2016-00434

### Response to Commission Staff's Third Request for Information

| Method                             | Schedule  | Schedule  | Schedule  |
|------------------------------------|-----------|-----------|-----------|
| ·                                  | Rate 11   | Rate 2    | Rate B1   |
| Total Base Rate Rev for Test Year  | 3,429,752 | 4,229,352 | 8,626,552 |
| Discount for the Test Year         | (371)     | (50,630)  | (114,999) |
| Primary Discount as Percent        |           |           |           |
| of Base Rate Revenue               | -0.01%    | -1.20%    | -1.33%    |
| Phase 1                            | Schedule  | Schedule  | Schedule  |
|                                    | Rate 11   | Rate 2    | Rate B1   |
| Base Rate Revenue                  | 3,601,950 | 4,270,247 | 8,708,913 |
| Primary Discount Percent           | -0.01%    | -1.20%    | -1.33%    |
| Primary Discount Amount            | (390)     | (51,120)  | (116,097) |
| Phase 2                            | Schedule  | Schedule  | Schedule  |
|                                    | Rate 11   | Rate 2    | Rate B1   |
| Base Rate Revenue                  | 3,659,395 | 4,312,301 | 8,795,431 |
| Primary Discount Percent           | -0.01%    | -1.20%    | -1.33%    |
| Primary Discount Amount            | (396)     | (51,623)  | (117,250) |
| Phase 3                            | Schedule  | Schedule  | Schedule  |
|                                    | Rate 11   | Rate 2    | Rate B1   |
| Base Rate Revenue                  | 3,716,772 | 4,352,669 | 8,881,695 |
| Primary Discount Percent           | -0.01%    | -1.20%    | -1.33%    |
| Primary Discount Amount            | (402)     | (52,107)  | (118,400) |
| Revised Primary Discounts          | Schedule  | Schedule  | Schedule  |
|                                    | Rate 11   | Rate 2    | Rate B1   |
| Primary Discount Phase 1           | (390)     | (51,120)  | (116,097) |
| Primary Discount Phase 2           | (396)     | (51,623)  | (117,250) |
| Primary Discount Phase 3           | (402)     | (52,107)  | (118,400) |
| Total                              | (1,188)   | (154,850) | (351,748) |
| Initial Proposed Primary Discounts | Schedule  | Schedule  | Schedule  |
|                                    | Rate 11   | Rate 2    | Rate B1   |
| Primary Discount Phase 1           | (380)     | (51,223)  | (116,185) |
| Primary Discount Phase 2           | (382)     | (51,685)  | (117,353) |
| Primary Discount Phase 3           | (385)     | (52,129)  | (118,518) |
| Total                              | (1,147)   | (155,037) | (352,056) |
| Change in Revenue Requirements     | (41)      | 187       | 308       |

## Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

14. Refer to Shelby Energy's response to Staffs Second Request, Item 17, and revised Exhibit J. Confirm that Shelby Energy inadvertently left the Envirowatts rate for Phase 2 at \$.02825 in revised Exhibit J when it intended to change the Envirowatts rate for all phases to \$.02750.

### Response 14:

It is confirmed that Shelby Energy intended to update that rate when it revised Exhibit J. Refer to Exhibit 3-12 for the Second Revised Exhibit J.

Refer to **USB Drive (D)** for an electronic version of the Second Revised Schedule J, labeled **Exhibit 3-12**.

Witness: James Adkins

# Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

15. Refer to Shelby Energy's response to Staff's Second Request, Items 20.b. and 20.d. Confirm that, since idle services are included in Total Plant in Service as stated in response to 20.b, idle services are included in the plant account balances that appear in the cost-of-service study. If this cannot be confirmed, explain.

### Response 15:

It is confirmed that idle services are included in the plant accounts in the cost-ofservice studies.

Witness: James Adkins

# Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

16. Refer to Shelby Energy's response to Staff's Second Request, Item 21e. Provide the supporting calculation for the minimum size of 3.05413.

### Response 16:

Since the zero intercept is a negative amount and the use of the minimum size underground conductor did not provide a reasonable percent, it was determined to use a combination of the two methods. The zero intercept with equation 1/0KLP 25KV Primary Conductor was used with amount for 185 Amps used as the basis for the minimum size. The use of any one of the individual conductors contained in the CPRs other than the 1/0 KLP 25KV Primary Conductor did seem feasible because this conductor makes up over seventy-five percent of the total investment in underground conductor for Shelby Energy.

Listed below is how the minimum size was computed and the \$3.05413 round to two decimal places results in \$3.05.

| Computation of Minimum Size Underground Conductor         |         |          |      |  |  |  |  |
|---|---------|----------|------|--|--|--|--|
| ,   |         |          |      |  |  |  |  |
| Zero interc   | ept     | -1.91445 |      |  |  |  |  |
| X Variable  |         | 0.02686  |      |  |  |  |  |
| 1/0 KLP 25KV Primary                                      |         | 185      | Amps |  |  |  |  |
| Formulat = Zero Intercept+(XVariable X Amp Rating of 185) |         |          |      |  |  |  |  |
| Result  | 3.05413 |          |      |  |  |  |  |

# Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

- 17. Refer to Shelby Energy's response to Staff's Second Request, Item 21.g.(1), and revised Exhibit R.
- a. Confirm that, in revised Exhibit R, "Consume Allocations" tab, cell 045 should contain the formula "=(N45)" rather than the formula currently included in the cell. If this cannot be confirmed, explain why the current formula is correct.
- b. Confirm that, in revised Exhibit R, "Consume Allocations" tab, cell 046 should contain the formula "=(N46)" rather than the formula currently included in the cell. If this cannot be confirmed, explain why the current formula is correct.
- c. If a correction to the cost-of-service study is necessary, provide a second revised Exhibit R in Excel spreadsheet format with the formulas intact and unprotected.

### Response 17a:

The proper formula in the cell D45 should be "=(N45)" and this change has been made in the Second Revised Exhibit R, **Exhibit 3-17** which is included with this response.

#### Response 17b:

The proper formula in the cell D45 should be "=(N46)" and this change has been made in the Second Revised Exhibit R, **Exhibit 3-17**, which is included with this response

### Response 17c:

Refer to **USB Drive (D)** for an electronic version of the Second Revised Exhibit R, labeled **Exhibit 3-17**.

# Shelby Energy Cooperative. Shelbyvile, KY

Case No. 2016-00434

# COST OF SERVICE STUDY Test Year Twelve Months Ending July 2016

Prepared: November 2016

## SHELBY ENERGY COOPERATIVE CASE NO. 2016-00434

Exhibit 3-17 Second Revised Exhibit R Page 2 of 43 Witness: James R Adkins

### **OUTLINE**

### Schedule

| Α   | Test Year - Actual & Adjusted                                |
|-----|--|
| В   | Functionalization of Expenses                                |
| С   | Funtionalization Footnotes                                   |
| D   | Rate Base Functionalized                                     |
| E · | Classification of Expenses                                   |
| F   | Determination of Demand & Consumer Related Plant Investments |
| G   | Allocation of Costs  |
| Н   | Demand & Energy Allocators                                   |
| i   | Consumer Allcators   |
| J   | Unbundled Statement of Operations                            |
| K   | Increase Amounts by Rate Class & Rate Design                 |

Rate Base for Each Rate Class

Exhibit 3-17 Second Revised Exhibit R Page 3 of 43 Witness: Jim Adkins

| _ |   |   | - |    |   |   | 1 |
|---|---|---|---|----|---|---|---|
| _ |   |   |   |    |   |   |   |
| S | c | h | 2 | 16 | ш | ρ |   |
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|      |                              | · · ]           |            | Test Year Adjustments |              |                                       |             |            |                 |
|------|------------------------------|-----------------|------------|-----------------------|--------------|---------------------------------------|-------------|------------|-----------------|
|      |                              | Actual          | Adjustment | Adjustment            | Adjustment   | Adjustment                            | Adjustment  | Adjustment | Pro Forma       |
| Acct | Description                  | <u>\$\$\$\$</u> | 1,2&7      | 3,4&5                 | 6,8,9,10,&11 | 12                                    | 14          | 18         | <u>\$\$\$\$</u> |
| No.  |                              |                 |            |                       |              |                                       |             |            | •               |
| 555  | Demand Charges               | 6,449,265       |            |                       |              |                                       |             | `          | 6,449,265       |
| •    | Energy Charges               | 25,765,598      |            |                       |              |                                       | (2,427,882) |            | 23,337,716      |
|      | Load Center Charges          | 560,772         |            |                       |              |                                       |             |            | 560,772         |
|      | Power Factor Penalty         | 5,153           |            |                       |              |                                       |             |            | 5,153           |
|      | Total Purchased Power        | 32,780,788      | <u>-</u>   | -                     | _            |                                       | (2,427,882) | -          | 30,352,906      |
| 580  | Operations Supv & Eng        | 73,514          | (700)      |                       |              | -                                     | ,           |            | 72,813          |
| 583  | Overhead Line Exp.           | 621,508         | (905)      | •                     |              |                                       | ,           |            | 620,603         |
| 584  | Underground Line Exp         | 18,650          | -          |                       |              |                                       |             |            | 18,650          |
| 585  | Street Lighting - Signal Exp | 900             |            |                       |              |                                       |             |            | 900             |
| 586  | Meter Expense                | 263,977         | (1,748)    |                       | _            |                                       |             |            | 262,229         |
| 587  | Consumer Installations       | 179,808         | (117)      |                       |              |                                       |             |            | 179,692         |
| 588  | Misc. Distribution Exp       | 481,355         | (2,373)    | 32,519                |              |                                       |             |            | 511,501         |
|      |                              |                 | ,          |                       |              |                                       |             |            | •               |
|      | Total Operations             | 1,639,712       | (5,843)    | 32,519                | -            | -                                     | -           |            | 1,666,388       |
|      |                              |                 |            |                       |              |                                       |             |            |                 |
| 590  | Maint Supv & Eng             | 27,769          | (155)      |                       | ,            |                                       |             |            | 27,614          |
| 592  | Maint of Station Equip       | <u>.</u> .      |            | ,                     |              |                                       |             |            | <u> </u>        |
| 593  | Maint. Overhead Lines        | 3,090,074       | (5,490)    |                       | (495,798)    |                                       |             | -          | 2,588,787       |
| 594  | Maint of Underground Lines   | 189,088         | (1,611)    |                       |              |                                       |             |            | 187,477         |
| 595  | Maint Line Transformers      | (1,795)         | (13)       |                       |              |                                       |             |            | (1,808)         |
| 596  | Maint of St Lg & Signal Sys  | -               |            |                       |              |                                       |             | ,          |                 |
| 597  | Maintenance of Meters        | 10,533          | (99)       |                       |              |                                       |             |            | 10,434          |
| 598  | Maint Misc Distrib Plant     | 117,699         | (1,060)    | 1,391                 |              | · · · · · · · · · · · · · · · · · · · |             |            | 118,030         |
| _    | Total Distribut Maintenance  | 3,433,368       | (8,428)    | 1,391                 | (495,798)    | -                                     | -           | -          | 2,930,534       |

Exhibit 3-17 Second Revised Exhibit R Page 4 of 43 Witness: Jim Adkins

Schedule A

|       | ·                            |                 |            |                   | Test Year A  | Adjustments |             |            |                     |
|-------|------------------------------|-----------------|------------|-------------------|--------------|-------------|-------------|------------|---------------------|
|       |                              | Actual          | Adjustment | <u>Adjustment</u> | Adjustment   | Adjustment  | Adjustment  | Adjustment | Pro Forma           |
| Acct  | Description                  | <u>\$\$\$\$</u> | 1,2&7      | 3,4&5             | 6,8,9,10,&11 | 12          | 14          | 18         | <u>\$\$\$\$</u>     |
| 901   | Supervision                  | 117,396         | (1,140)    |                   |              |             |             |            | 116,256             |
| 902   | Meter Reading Expense        | 179,242         | (1,114)    |                   |              |             | -           |            | 178,127             |
| 903   | Cons Recds & Collections     | 316,216         | (1,282)    | 358               |              |             |             |            | 315,292             |
| 904   | Uncollectible Accounts       | (102,825)       | - (1,282)  | 336               | -            |             |             |            | (102,825)           |
| -     |                              |                 |            |                   |              |             |             |            | -                   |
|       | Total Consumer Accounts      | 510,028         | (3,536)    | 358               |              |             |             |            | 506,849             |
| 907   | Supervision                  | 33,244          | (293)      |                   |              |             |             | -          | 22.054              |
| 908   | Customer Assist. Expense     | 81,627          | (1,330)    |                   |              |             |             |            | 32,951              |
| 909   | Customer Information Exp     | 62,926          | (426)      |                   |              | <u> </u>    |             |            | 80,297              |
| 910   | Misc Customer Service Exp    | 250,407         | (2,332)    | 295               |              |             |             |            | 62,500              |
| 912   | Demonstration & Selling Exp  | (11,891)        | (138)      |                   |              |             |             |            | 248,370<br>(12,029) |
|       |                              |                 |            |                   |              |             |             |            | -                   |
|       | Total Customer Service       | 416,313         | (4,519)    | 295               |              |             |             |            | 412,088             |
|       | Total of Above               | 38,780,210      | (22,326)   | 34,563            | (495,798)    |             | (2,427,882) |            | 35,868,766          |
| 920   | Administrative Salaries      | 325,701         | (3,271)    |                   |              |             |             |            | 222.420             |
| 921   | Office Supplies              | 34,489          | (3,271)    |                   |              |             |             |            | 322,430<br>34,489   |
| 923   | Outside Services             | 77,739          |            |                   | (31,332)     |             |             |            | 46,407              |
| 930.2 |                              | 353,886         | (404)      | 1,675             | (31,332)     | 25,000      |             |            | 380,157             |
| 930.3 | Directors Fees & Expenses    | 106,611         | (10.17     |                   | (73,181)     | 25,550      |             |            | 33,430              |
| 931   | Rents                        | 6,300           |            |                   | (17,562)     |             |             |            | (11,262)            |
| 935   | Maintenance of General Plant | 82,402          | (50)       |                   |              |             |             |            | 82,352              |
|       | Tatal Admin 9 Canaval        | 007.420         | (2.725)    | 4 675             | (422.075)    | 25 000      |             |            | -                   |
|       | Total Admin & General        | 987,129         | (3,725)    | 1,675             | (122,075)    | 25,000      |             |            | 888,004             |

Exhibit 3-17 Second Revised Exhibit R
Page 5 of 43
Witness: Jim Adkins

|  | Sch | edu | le | Α |
|--|-----|-----|----|---|
|--|-----|-----|----|---|

|       |                             | •               |            | Test Year Adjustments |              |                                       |             |            |                 |
|-------|-----------------------------|-----------------|------------|-----------------------|--------------|---------------------------------------|-------------|------------|-----------------|
|       | , ,                         | Actual          | Adjustment | Adjustment            | Adjustment   | Adjustment                            | Adjustment  | Adjustment | Pro Forma       |
| Acct  | Description                 | <u>\$\$\$\$</u> | 1, 2 & 7   | 3, 4 & 5              | 6,8,9,10,&11 | 12                                    | 14          | 18         | <u>\$\$\$\$</u> |
|       |                             |                 | -          |                       |              |                                       |             |            | _               |
| 403.6 | Deprec. Distribution Plant  | 2,548,658       | -          | 422,492               |              |                                       |             |            | 2,971,150       |
| 403.7 | Deprec. General Plant       | 68,854          |            |                       |              | ,                                     |             |            | 68,854          |
|       | Total Depreciation          | 2,617,512       |            | 422,492               | _            | - ,                                   | -           | -          | 3,040,004       |
|       |                             |                 |            | <del></del>           |              |                                       | •           |            |                 |
| 408   | Taxes Other Than Income Tax | 53,102          |            |                       |              |                                       | ,           |            | 53,102          |
| 426.1 | Donations                   | 6,869           |            |                       | (6,869)      |                                       |             |            | -               |
|       | Total Miscellaneous         | 59,971          | -          | -                     | (6,869)      | -                                     |             | ·          | 53,102          |
| 427   | Total Interest on LTD       | 1,471,969       |            | 70,976                | · -          | · · · · · · · · · · · · · · · · · · · |             |            | 1,542,945       |
|       |                             |                 | ·····      |                       |              |                                       |             |            | <u>-</u>        |
| 431   | Total Short Term Interest   | 15,5 <u>61</u>  | -          | (11,597)              |              | ,                                     |             |            | 3,964           |
|       | Total Costs                 | 43,932,351      | (26,051)   | 518,109               | (624,742)    | 25,000                                | (2,427,882) | -          | 41,396,785      |

Exhibit 3-17 Second Revised Exhibit R

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|      |                             |                 |                   |                   |              |             |                   |                   | ochedule A      |
|------|-----------------------------|-----------------|-------------------|-------------------|--------------|-------------|-------------------|-------------------|-----------------|
|      |                             |                 |                   |                   | Test Year A  | Adjustments |                   |                   |                 |
|      |                             | Actual          | <u>Adjustment</u> | <u>Adjustment</u> | Adjustment   | Adjustment  | <u>Adjustment</u> | <u>Adjustment</u> | Pro Forma       |
| Acct | Description                 | <u>\$\$\$\$</u> | 1,2&7             | 3,4&5             | 6,8,9,10,&11 | 12          | 14                | 18                | <u>\$\$\$\$</u> |
|      |                             | •               |                   |                   |              |             |                   |                   | -               |
|      | Margin Requirements         | 1,471,969       | <u>-</u>          | 70,976            | <u> </u>     | <u>-</u>    | <del>-</del>      |                   | 1,542,94        |
|      | Total Revenue Requirements  | 45,404,320      | (2 <u>6</u> ,051) | 589,085           | (624,742)    | 25,000      | (2,427,882)       | -                 | -<br>42,939,73  |
| ٠    | Less; Misc Income           |                 |                   | •                 |              |             |                   |                   | -               |
|      | CATV & Non-Recurring Chrgs  | •               |                   | •                 |              |             |                   |                   | -<br>           |
| 450  | Forfeited Discounts         | 356,988         |                   |                   |              |             |                   |                   | 356,98          |
| 454  | Rent from Electric Prop.    | 318,220         |                   |                   | •            |             |                   |                   | 318,22          |
| 456  | Other Electric Property     | (40,587)        |                   | ,                 |              |             |                   | 2,909             | (37,67          |
|      | Total Misc Income           | 634,621         | -                 | <u>.</u> .        | -            | -           | -                 | 2,909             | -<br>637,53     |
|      | Less: Other Income          | •               | ,-                |                   |              |             |                   |                   |                 |
| 417  | Management Consult Serv     | . 300           | ,                 |                   |              |             |                   |                   | 30              |
| 418  | Equity Earnings-Subsidiary  | 35,101          |                   |                   |              | •           |                   |                   | 35,10           |
| 419  | Interest Income             | 39,459          |                   | •                 | •            |             | •                 |                   | 39,45           |
| 421  | Disposition of Property-Net | ,<br>5,193      |                   |                   |              |             |                   | •                 | 5,19            |
| 423  | G&T Capital Credits         | 1,810,069       |                   |                   |              | (1,810,069) |                   |                   | , -             |
| 424  | Other Capital Credits       | 62,300          |                   |                   |              | •           |                   |                   | 62,30           |
|      | Total Other Income          | 1,952,422       | <u> </u>          | -                 | <del>-</del> | (1,810,069) | · <u>-</u> .      |                   | 142,35          |
|      | Revenue Requirements        |                 |                   |                   | •            |             |                   |                   | -               |
|      | from Rates                  | 42,817,276      | (26,051)          | 589,085           | (624,742)    | 1,835,069   | (2,427,882)       | (2,909)           | 42,159,84       |

## SHELBY ENERGY COOPERATIVE CASE NO. 2016-00434

|            |                               | Wages &  | Payroll     | Witn      | ess: James Ad                                    |
|------------|-------------------------------|----------|-------------|-----------|--|
|            | -                             | Salaries | Taxes       | Retirment | Total  |
| Adjustme   | nts 1, 2 and 7                | <u>1</u> | <u>2</u>    | <u>7</u>  |  |
|            |                               |          |             |           |  |
| Distribut  | ion - operations              | (4,184)  | (433)       | (1,226)   | (5,843)  |
| Distribut  | ion - maintenance             | (6,035)  | (625)       | (1,768)   | (8,428)  |
| Consume    | er accounts                   | (2,532)  | (262)       | (742)     | (3,536)  |
| Custome    | r service                     | (3,138)  | (325)       | (919)     | (4,382)  |
| Sales      |                               | (99)     | (10)        | (29)      | (138)  |
| Administ   | rative and general            | (2,667)  | (276)       | (781)     | (3,724)  |
|            |                               | (10.077) | (4.004)     | (=        | (2.5.254)  |
| Total op   | perating expenses             | (18,655) | (1,931)     | (5,465)   | (26,051)   |
| A 11       |                               |          |             | D         | A11 +:   |
| Allocation | of Adjustments to Accounts    |          | Wage & Sal. |           | Allocation                                       |
|            |                               |          | Expenses    | Total     | Adjustments                                      |
| 580.00     | Operations                    |          | 46,156      | 2.7%      |  |
| 583.00     | Overhead line                 |          | 59,658      | 3.5%      | <del></del>                                      |
| 584.00     | Underground                   | ·        | 0           | 0.0%      |  |
| 586.00     | Meter                         |          | 115,233     | 6.7%      | <del></del>                                      |
| 587.00     | Installations                 |          | 7,682       | 0.4%      | <del></del>                                      |
| 588.00     | Miscellaneous distribution    | `        | 156,393     | 9.1%      | (2,373)  |
| 590.00     | Maintenance                   |          | 10,212      | 0.6%      | (155)  |
| 593.00     | Overhead line                 |          | 361,827     | 21.1%     | (5,490)  |
| 594.00     | Underground                   |          | 106,177     | 6.2%      | (1,611)  |
| 595.00     | Transformers                  |          | 848         | 0.0%      | (13)   |
| 597.00     | Street lights                 |          | 6,556       | 0.4%      | (99)   |
| 598.00     | Miscellaneous maintenance     |          | 69,869      | 4.1%      | (1,060)  |
| 901.00     | Supervision                   |          | 75,148      | 4.4%      | (1,140)  |
| 902.00     | Meter reading                 |          | 73,441      | 4.3%      | (1,114)  |
| 903.00     | Consumer records              |          | 84,509      | 4.9%      | (1,282)  |
| 904.00     | Consumer records              |          | 0           | 0.0%      |  |
| 907.00     | Supervision, Customer service |          | 19,338      | 1.1%      | (293)  |
| 908.00     | Consumer accounting           |          | 87,678      | 5.1%      | (1,330)  |
| 909.00     | Consumer information          |          | 28,086      | 1.6%      |  |
| 910.00     | Misc customer information     |          | 153,686     | 9.0%      | · · · · ·  |
| 912.00     | Customer demonstration        | •        | 9,089       | 0.5%      |  |
| 920.00     | Administrative                | -        | 194,004     | 11.3%     | <del></del>                                      |
| 926.00     | Employee benefits             |          | 21,593      | 1.3%      | <del>\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del> |
| 930.00     | Miscellaneous                 |          | 26,628      | 1.6%      | <del> </del>                                     |
| 935.00     | Maintenance general plant     | -        | 3,270       | 0.2%      | <del> </del>                                     |
|            | ,                             |          | 1,717,081   | 1         | (26,051)   |

## SHELBY ENERGY COOPERATIVE CASE NO. 2016-00434

Exhibit 3-17 Second Revised Exhibit R Page 8 of 3 Schedule A

| - Witness:    | lamae                 | Adking                  |
|---------------|-----------------------|-------------------------|
| - VVIII 1000. | <del>- vai 1100</del> | <del>7 (U</del> NIII 13 |

|                            | Depreciation | Property | Interest |          |
|----------------------------|--------------|----------|----------|----------|
|                            |              | Taxes    | Expense  | Total    |
|                            | <u>3</u> .   | 4        | <u>5</u> | •        |
| Operating Expenses:        |              |          |          |          |
| Cost of power:             |              |          |          |          |
| Base rates                 |              |          |          |          |
| Fuel and surcharge         |              |          |          |          |
| Distribution - operations  | 778          | 31,741   |          | 32,519   |
| Distribution - maintenance | 1,391        |          |          | 1,391    |
| Consumer accounts          | 358          |          |          | 358      |
| Customer service           | 295          |          |          | 295      |
| Sales                      |              |          |          | -        |
| Administrative and general | 507          | 1,168    |          | 1,675    |
| Depreciation               | 422,492      |          |          | 422,492  |
| Taxes - other              |              |          |          | <b>-</b> |
| Interest on long-term debt |              |          | 70,976   | 70,976   |
| Interest expense - other   |              |          | (11,597) | (11,597) |
| Other deductions           |              |          |          | -        |
| Total                      | 425,821      | 32,909   | 59,379   | 518,109  |

Exhibit 3-17 Second Revised Exhibit R Page 9 of 43 Witness: James Adkins Schedule B

|      |                              |               | <del></del>     |               |                |              |
|------|------------------------------|---------------|-----------------|---------------|----------------|--------------|
| •    |                              | Allocation    | Pro Forma       | Power         | Substa-        | . 1          |
| Acct | Description                  | <u>Basis</u>  | <u>\$\$\$\$</u> | <u>Supply</u> | <u>Station</u> | <u>Lines</u> |
| No.  |                              |               |                 |               |                | _            |
| 555  | Demand Charges               | Direct Assign | 6,449,265       | 6,449,265     | _              |              |
|      | Energy Charges               | Direct Assign | 23,337,716      | 23,337,716    | -              |              |
| ,    | Load Center Charges          | Direct Assign | 560,772         | 560,772       |                |              |
|      | Power Factor Penalty         | Direct Assign | 5,153           | 5,153         |                |              |
|      | <b>Total Purchased Power</b> |               | 30,352,906      | 30,352,906    |                |              |
|      |                              |               |                 | ,             |                |              |
| 580  | Operations Supv & Eng        | Prop. Exp(b)  | 72,813          |               |                | 35,800       |
| 583  | Overhead Line Exp.           | Plant Bal (a) | 620,603         |               |                | 516,501      |
| 584  | Underground Line Exp         | Plant Bal (a) | 18,650          | ·             |                | 15,522       |
| 585  | Street Lighting - Signal Exp | Direct Assign | 900             | ٠.            | ·              |              |
| 586  | Meter Expense                | Direct Assign | 262,229         |               |                |              |
| 587  | Consumer Installations .     | Direct Assign | 179,692         |               |                |              |
| 588  | Misc. Distribution Exp       | Prop. Exp(b)  | 511,501         |               | . 0            | 251,489      |
| 589  | Rents                        | Prop. Exp(b)  |                 |               |                | _            |
|      | Total Operations             |               | 1,666,388       | -             |                | 819,312      |
|      |                              |               |                 |               |                |              |
| 590  | Maint Supv & Eng             | Prop. Exp(b)  | 27,614          |               |                | 22,911       |
| 592  | Maint of Station Equip       | Direct Assign | -               |               |                |              |
| 593  | Maint. Overhead Lines        | Pit Bal (a)   | 2,588,787       | ,             | 3              | 2,154,535    |

Exhibit 3-17 Second Revised Exhibit R Page 10 of 43 Witness: James Adkins Schedule B

|      |                              | Allocation    | Trans .    |                 |         | Cons. & Acct    | Outdoor  |
|------|------------------------------|---------------|------------|-----------------|---------|-----------------|----------|
| Acct | Description                  | <u>Basis</u>  | former     | <u>Services</u> | Meters  | <u>Services</u> | Lighting |
| No.  | ·                            |               |            |                 |         |                 |          |
| 555  | Demand Charges               | Direct Assign |            |                 |         |                 | ,        |
| •    | Energy Charges               | Direct Assign |            |                 |         |                 |          |
|      | Load Center Charges          | Direct Assign |            |                 |         |                 |          |
|      | Power Factor Penalty         | Direct Assign |            |                 |         |                 |          |
|      | Total Purchased Power        |               |            |                 | 2 +     |                 |          |
|      |                              |               |            |                 |         |                 |          |
| 580  | Operations Supv & Eng        | Prop. Exp(b)  | -          | 7,216           | 17,646  | ٠.              | 12,152   |
| 583  | Overhead Line Exp.           | Plant Bal (a) | 5          | 104,102         |         |                 |          |
| 584  | Underground Line Exp         | Plant Bal (a) |            | 3,128           |         |                 |          |
| 585  | Street Lighting - Signal Exp | Direct Assign |            |                 |         |                 | 900      |
| 586  | Meter Expense                | Direct Assign |            |                 | 262,229 | ·               |          |
| 587  | Consumer Installations       | Direct Assign |            |                 |         |                 | 179,692  |
| 588  | Misc. Distribution Exp       | Prop. Exp(b)  |            | 50,688          | 123,957 |                 | 85,366   |
| 589  | Rents                        | Prop. Exp(b)  |            |                 |         |                 |          |
| _    | <b>Total Operations</b>      |               | -          | 165,134         | 403,832 | -               | 278,110  |
|      |                              |               |            |                 |         |                 |          |
| 590  | Maint Supv & Eng             | Prop. Exp(b)  | (18)       | 4,618           | 103     |                 |          |
| 592  | Maint of Station Equip       | Direct Assign |            |                 |         | ·               |          |
| 593  | Maint. Overhead Lines        | Plt Bal (a)   | Ţ <u> </u> | 434,252         | -       |                 |          |

Exhibit 3-17 Second Revised Exhibit R Page 11 of 43 Witness: James Adkins Schedule B

|      |                                    | Allocation    | Pro Forma  | Power      | Substa- |            |
|------|------------------------------------|---------------|------------|------------|---------|------------|
| Acct | Description                        | <u>Basis</u>  | \$\$\$\$   | Supply     | Station | Lines      |
| No.  |                                    |               |            |            |         |            |
| 594  | Maint of Underground Lines         | Plt Bal (a)   | 187,477    | ,          |         | 156,029    |
| 595  | Maint Line Transformers            | Direct Assign | (1,808)    |            |         |            |
| -596 | Maint of St Lg & Signal Sys        | Direct Assign |            |            |         |            |
| 597  | Maintenance of Meters              | Direct Assign | 10,434     |            |         |            |
| 598  | Maint Misc Distrib Plant           | Prop. Exp {c} | 118,030    |            |         | 97,927     |
|      | <b>Total Distribut Maintenance</b> |               | 2,930,534  | -          |         | 2,431,402  |
|      |                                    | *             |            |            |         |            |
| 901  | Supervision                        | Direct Assign | 116,256    |            |         |            |
| 902  | Meter Reading Expense              | Direct Assign | 178,127    |            |         |            |
| 903  | Cons Recds & Collections           | Direct Assign | 315,292    |            |         |            |
| 904  | Uncollectible Accounts             | Direct Assign | (102,825)  |            |         |            |
|      | Total Consumer Accounts            |               | 506,849    |            |         | _          |
|      |                                    |               |            |            |         |            |
| 907  | Supervision                        | Direct Assign | 32,951     |            | ·       | ļ <u>.</u> |
| 908  | Customer Assist. Expense           | Direct Assign | 80,297     |            |         |            |
| 909  | Customer Information Exp           | Direct Assign | 62,500     |            |         |            |
| 910  | Misc Customer Service Exp          | Direct Assign | 248,370    |            |         |            |
| 912  | Demonstration & Selling Exp        | Direct Assign | (12,029)   |            |         |            |
|      | Total Customer Service             |               | 412,088    | -          | · , -   | -          |
|      | Total of Above                     |               | 35,868,766 | 30,352,906 |         | 3,250,714  |

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Second Revised Exhibit R
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Witness: James Adkins
Schedule B

|      | -                                  | Allocation    | Trans   |          |                                       | Cons. & Acct | Outdoor  |
|------|------------------------------------|---------------|---------|----------|---------------------------------------|--------------|----------|
| Acct | Description                        | Basis         | former  | Services | <u>Meters</u>                         | Services     | Lighting |
| No.  |                                    |               |         |          |                                       |              |          |
| 594  | Maint of Underground Lines         | Pit Bai (a)   |         | 31,448   |                                       |              |          |
| 595  | Maint Line Transformers            | Direct Assign | (1,808) |          | i                                     | <i>'</i> .   |          |
| 596  | Maint of St Lg & Signal Sys        | Direct Assign |         | ٠        |                                       |              |          |
| 597  | Maintenance of Meters              | Direct Assign |         |          | 10,434                                |              |          |
| 598  | Maint Misc Distrib Plant           | Prop. Exp {c} | (77)    | 19,737   | √ 442                                 |              |          |
|      | <b>Total Distribut Maintenance</b> |               | (1,902) | 490,055  | 10,979                                |              | -        |
|      |                                    |               |         |          |                                       |              |          |
| 901  | Supervision                        | Direct Assign |         |          |                                       |              |          |
| 902  | Meter Reading Expense              | Direct Assign |         |          |                                       | 178,127      |          |
| 903  | Cons Recds & Collections           | Direct Assign |         |          | •                                     | 315,292      |          |
| 904  | Uncollectible Accounts             | Direct Assign |         |          |                                       | (102,825)    |          |
|      | Total Consumer Accounts            | ·             | -       | -        |                                       | 506,849      | · .=     |
|      |                                    | 5:            |         |          |                                       | - 22.054     |          |
| 907  | Supervision                        | Direct Assign | ·       | ·        | · · · · · · · · · · · · · · · · · · · | 32,951       |          |
| 908  | Customer Assist. Expense           | Direct Assign | ,       |          |                                       | 80,297       |          |
| 909  | Customer Information Exp           | Direct Assign | _       |          |                                       | 62,500       |          |
| 910  | Misc Customer Service Exp          | Direct Assign |         |          |                                       | 248,370      |          |
| 912  | Demonstration & Selling Exp        | Direct Assign |         |          |                                       | (12,029)     |          |
|      | Total Customer Service             |               |         | -        |                                       | 412,088      | -        |
|      |                                    |               |         | .'       |                                       |              |          |
| ·    | Total of Above                     |               | (1,902) | 655,189  | 414,811                               | 918,938      | 278,11   |

Exhibit 3-17 Second Revised Exhibit R

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vitness: James Adkins Schedule B

|       |                              | Allocation   | Pro Forma       | Power         | Substa-        |              |
|-------|------------------------------|--------------|-----------------|---------------|----------------|--------------|
| Acct  | Description                  | <u>Basis</u> | <u>\$\$\$\$</u> | <u>Supply</u> | <u>Station</u> | <u>Lines</u> |
| No.   |                              |              |                 |               |                |              |
|       |                              | •            |                 |               |                |              |
| 920   | Administrative Salaries      | Prop. Exp(d) | 322,430         |               |                | 190,021      |
| 921   | Office Supplies              | Prop. Exp(d) | 34,489          |               |                | 20,326       |
| 923   | Outside Services             | Prop. Exp(d) | 46,407          |               | <del>.</del>   | 27,350       |
| 930.2 | Misc. General Exp-Other      | Prop. Exp(d) | 380,157         |               | , -            | 224,042      |
| 930.3 | Directors Fees & Expenses    | Prop. Exp(d) | 33,430          |               | -              | 19,702       |
| 931   | Rents                        | Prop. Exp(d) | (11,262)        |               |                | (6,637       |
| 935.  | Maintenance of General Plant | Prop. Exp(d) | 82,352          |               | -              | 48,534       |
|       | Total Admin & General        | l.           | 888,004         |               | -              | 523,336      |
| 1     |                              |              | -               |               | •              |              |
| 403   | Deprec. Distribution Plant   | Net Plant    | 2,971,150       |               |                | 1,961,646    |
| 403   | Deprec. General Plant        | Net Plant    | 68,854          |               | -              | 45,460       |
|       | Total Depreciation           |              | 3,040,004       | -             | -              | 2,007,106    |
|       |                              |              | -               |               | -              |              |
| 408   | Taxes Other Than Income Taxe | Rate Base    | 53,102          |               | -              | 35,061       |
| 426.1 | Donations                    | Rate Base    |                 |               |                | -            |
|       | Total Miscellaneous          |              | 53,102          | -             | , <b>-</b>     | 35,061       |
|       |                              |              | -               |               |                |              |
|       | Total Interest on LTD        |              | 1,542,945       | -             | -              | 1,018,742    |
|       |                              |              |                 |               |                |              |
|       | Total Short Term Interest    | Rate Base    | 3,964           | -             | _              | 2,617        |
|       |                              |              | -               |               |                |              |
|       | Total Costs                  |              | 41,396,785      | 30,352,906    | -              | 6,837,575    |

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Second Revised Exhibit R
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Witness: James Adkins
Schedule B

|       |                              | Allocation   | Trans         |                 | 3             | Cons. & Acct    | Outdoor  |
|-------|------------------------------|--------------|---------------|-----------------|---------------|-----------------|----------|
| Acct  | Description                  | <u>Basis</u> | <u>former</u> | <u>Services</u> | <u>Meters</u> | <u>Services</u> | Lighting |
| No.   |                              |              |               |                 |               |                 |          |
|       | ·                            |              |               | ٠               |               |                 |          |
| 920 - | Administrative Salaries      | Prop. Exp(d) | (111)         | 38,299          | 24,248        | 53,717          | 16,257   |
| 921   | Office Supplies              | Prop. Exp(d) | (12)          | 4,097           | 2,594         | 5,746           | 1,739    |
| 923   | Outside Services             | Prop. Exp(d) | (16)          | 5,512           | 3,490         | 7,731           | 2,340    |
| 930.2 | Misc. General Exp-Other      | Prop. Exp(d) | (131)         | 45,156          | 28,589        | 63,334          | 19,168   |
| 930.3 | Directors Fees & Expenses    | Prop. Exp(d) | (12)          | 3,971           | 2,514         | 5,569           | 1,686    |
| 931_  | Rents                        | Prop. Exp(d) | 4             | (1,338)         | (847)         | (1,876)         | (568)    |
| 935   | Maintenance of General Plant | Prop. Exp(d) | (28)          | 9,782           | 6,193         | 13,720          | 4,152    |
|       | Total Admin & General        |              | (306)         | 105,480         | 66,781        | 147,941         | 44,773   |
|       |                              |              |               |                 |               |                 |          |
| 403   | Deprec. Distribution Plant   | Net Plant    | 354,391       | 393,281         | 151,804       | 17,542          | 92,486   |
| 403   | Deprec. General Plant        | Net Plant    | 8,213         | 9,114           | 3,518         | 407             | 2,143    |
|       | Total Depreciation           |              | 362,604       | 402,395         | 155,322       | 17,948          | 94,629   |
|       |                              |              | ,             |                 |               |                 |          |
| 408   | Taxes Other Than Income Taxe | Rate Base    | 6,336         | 7,029           | 2,713         | 310             | 1,653    |
| 426.1 | Donations                    | Rate Base    | -             | -               | -             | -               | -        |
|       | Total Miscellaneous          |              | 6,336         | 7,029           | 2,713         | 310             | 1,653    |
|       |                              |              |               |                 | ÷             |                 |          |
|       | Total Interest on LTD        |              | 184,109       | 204,243         | 78,819        | 9,014           | 48,017   |
| -     |                              | ·            |               |                 |               |                 |          |
|       | Total Short Term Interest    | Rate Base    | 473           | 525             | 202           | 23              | 123      |
|       |                              |              |               |                 | •             |                 |          |
|       | Total Costs                  |              | 551,314       | 1,374,861       | 718,648       | 1,094,174       | 467,306  |

### SHELBY ENERGY COOPERATIVE

### CASE NO. 2016-00434

Exhibit 3-17 Second Revisded Exhibit R
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Witness: James Adkins

Schedule C

### **FUNCTIONALIZATION OF REVENUE REQUIREMENTS**

### **FOOTNOTES**

|     | <del>- "</del>              | · T        | <u> </u> | T            | · · · · · · · · · · · · · · · · · · · |         |          |           |              |
|-----|-----------------------------|------------|----------|--------------|---------------------------------------|---------|----------|-----------|--------------|
|     |                             |            | -        |              | *                                     |         |          | •         |              |
|     |                             |            |          |              |                                       |         |          |           |              |
| (a) | Plant Balances              |            |          | -            |                                       |         |          |           |              |
|     |                             | Amount     | Percent  |              |                                       |         |          |           | 1            |
|     | Poles, Towers & Fixtures    | 24,800,540 |          |              | ,                                     |         | ,        |           |              |
|     | Overhead Conductor          | 24,273,854 |          |              |                                       |         |          | 1         |              |
|     | Underground Conductor       | 6,924,847  |          |              |                                       |         |          |           |              |
|     | Subtotal                    | 55,999,240 | 83.2%    |              |                                       |         | . 1      |           |              |
|     | Services                    | 11,286,785 | 16.8%    |              |                                       |         |          |           |              |
|     | Total                       | 67,286,025 | 100.0%   | •            |                                       |         |          |           |              |
|     | . :                         | ,          |          |              | ,                                     |         |          |           |              |
| (b) | Expense Proportion          |            |          |              |                                       |         |          |           |              |
|     | ,                           | Stations   | Lines    | Transformers | Services                              | Meters  | Lighting | Total     | <del>:</del> |
| 583 | Overhead Line Exp.          | -          | 516,501  | _ ·          | 104,102                               |         | -        | 620,603   |              |
|     | Underground Line Exp        | -          | 15,522   | -            | 3,128                                 | -       | -        | 18,650    |              |
|     | Street Lighting - Signal Ex | р          |          |              |                                       | ,       | 900      | 900       |              |
|     | Meter Expense               | ₹.         |          | -            |                                       | 262,229 | -        | 262,229   |              |
|     | Consumer Installations      | -          |          | - ·          |                                       | -       | 179,692  | 179,692   |              |
|     | Total                       | -          | 532,023  | -            | 107,230                               | 262,229 | 180,592  | 1,082,074 |              |
|     | Percent                     | 0.00%      | 49.17%   | 0.00%        | 9.91%                                 | 24.23%  | 16.69%   | 100.00%   |              |
|     |                             |            |          |              |                                       |         |          |           |              |

### SHELBY ENERGY COOPERATIVE

### CASE NO. 2016-00434

### **FUNCTIONALIZATION OF REVENUE REQUIREMENTS**

Exhibit 3-17 Second Revised Exhibit R

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Witness: James Adkins

Schedule C

### **FOOTNOTES**

|     |                            |           |              | ,            |                | - · · · · · - · · · · · · · · · · · · · |          |          |           |
|-----|----------------------------|-----------|--------------|--------------|----------------|---|----------|----------|-----------|
| [c] | Expense Proportion         |           |              |              |                |   |          |          |           |
|     |                            | Lines     | Transformers | Services     | Meters         | Total                                   |          |          |           |
|     |                            |           |              |              |                |   |          |          |           |
| 593 | Maint. Overhead Lines      | 2,154,535 | -            | 434,252      |                | 2,588,787                               |          |          |           |
| 594 | Maint of Underground Li    | 156,029   | -            | 31,448       | · <del>-</del> | 187,477                                 |          |          | -         |
| 595 | Maint Line Transformers    | -         | (1,808)      |              | _              | (1,808)                                 |          |          |           |
| 596 | Maint of St Lg & Signal Sy | -         |              | -            |                | -                                       |          |          |           |
| 597 | Maintenance of Meters      |           | -            | -            | 10,434         | 10,434                                  |          |          |           |
|     | Total                      | 2,310,564 | (1,808)      | 465,700      | 10,434         | 2,784,890                               |          |          |           |
|     | Percent                    | 82.97%    | -0.06%       | 16.72%       | 0.37%          | 100.00%                                 |          |          |           |
| (d) | Expense Proportion         |           |              |              |                |   |          |          |           |
|     |                            | Station   | Lines        | Transformers | Services       | Meters                                  | Consumer | Lighting | Total     |
|     | Total Operations           |           | 819,312      | _            | 165,134        | 403,832                                 | -        | 278,110  | 1,666,388 |
|     | Total Distribut Maintena   | -         | 2,431,401.79 | (1,902.39)   | 490,055.02     | 10,979.29                               | -        | -        | 2,930,534 |
| _   | Total Consumer Account     | -         |              | -            | ,<br>-         | -                                       | 506,849  | •        | 506,849   |
|     | Total Customer Service     |           | -            | -            | _              | · _                                     | 412,088  |          | 412,088   |
|     | Total                      | -         | 3,250,714    | (1,902)      | 655,189        | 414,811                                 | 918,938  | 278,110  | 5,515,860 |
| -   | Percent                    | 0.00%     | 58.93%       | -0.03%       | 11.88%         | 7.52%                                   | 16.66%   | 5.04%    | 100.009   |

#### SHELBY ENERGY COOPERATIVE Case No. 2016-00434 NET INVESTMENT RATE BASE

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Schedule D

|     |                             | - 1        | 1        | -           |              |            |           | Consumer        |          |
|-----|-----------------------------|------------|----------|-------------|--------------|------------|-----------|-----------------|----------|
|     |                             |            |          |             |              |            | Meters    | & Accounting    | Outdoor  |
|     | Description                 | \$\$\$\$   | Stations | Lines       | Transformers | Services   | Consumer  | <u>Services</u> | Lighting |
| 360 | Land & Land Rights          |            |          | _           |              |            |           | -               |          |
| 362 | Ctation Equipment           |            | -        |             |              |            |           |                 |          |
| 364 | Poles, Towers and Fixtures  | 24,800,540 |          | 24,800,540  |              | _          |           |                 |          |
| 365 | Overhead Conductor          | 24,273,854 |          | 24,273,854  |              |            |           |                 |          |
| 366 | Underground Conduit         | 307,821    |          | 307,821     |              |            |           |                 |          |
| 367 | UG Conductor                | 6,924,847  |          | 6,924,847   |              |            |           |                 |          |
| 368 | Line Transformers           | 10,505,808 |          |             | 10,505,808   |            |           | <u> </u>        |          |
| 369 | Services                    | 11,286,785 |          |             |              | 11,286,785 |           |                 | _        |
| 370 | Meters                      | 4,265,011  |          |             |              |            | 4,265,011 |                 | <u> </u> |
| 371 | Install. On Consumer Prem.  | 2,516,980  |          |             |              |            |           |                 | 2,516,98 |
| 373 | Street Ltg & Signal Systems | 67,096     |          |             |              |            |           |                 | 67,09    |
|     | Total Distribution Plant    | 84,948,742 | -        | 56,307,061  | 10,505,808   | 11,286,785 | 4,265,011 |                 | 2,584,07 |
|     |                             |            | 0.00%    | 66.28%      | 12.37%       | 13.29%     | 5.02%     | 0.00%           | 3.04     |
|     | Total General Plant         | 3,121,045  | -        | 1,839,355   | (1,076)      | 370,727    | 234,713   | 519,964         | 157,36   |
|     |                             |            |          |             |              |            |           |                 | •        |
|     |                             |            | 0.0%     | 58.9%       | 0.0%         | 11.9%      | 7.5%      | 16.7%           | 5.0      |
|     | Total Utility Plant         | 88,069,787 | -        | 58,146,416  | 10,504,732   | 11,657,511 | 4,499,724 | 519,964         | 2,741,44 |
|     | Accum. Depreciation         | 17,810,020 | -        | 11,758,730  | 2,124,332    | 2,357,454  | 909,962   | 105,150         | 554,39   |
|     | Net Plant                   | 70,259,767 | -        | 46,387,686  | 8,380,400    | 9,300,057  | 3,589,762 | 414,813         | 2,187,04 |
|     |                             | 88,843,077 | 0.00%    | . 66.02%    | 11.93%       | 13.24%     | 5.11%     | 0.59%           | 3.11     |
|     |                             |            |          |             |              |            |           |                 |          |
|     | CWIP                        | 773,290    | -        | 512,564     | 95,635       | 102,744    | 38,824    | - 1             | 23,52    |
|     | _                           | 71,033,057 | -        | 46,900,251  | 8,476,034    | 9,402,801  | 3,628,587 | 414,813         | 2,210,57 |
|     | Plus                        | ,          |          | <del></del> |              |            |           |                 |          |
|     | Cash Working Capital        | 873,319    |          | 576,592     | 104,167      | 115,598    | 44,620    | 5,156           | 27,18    |
|     | Materials & Supplies        | 298,301    | -        | 196,948     | 35,581       | 39,485     | 15,241    | 1,761           | 9,28     |
|     | Prepayments                 | 77,834     | -        | 51,389      | 9,284        | 10,303     | 3,977     | 460             | 2,42     |
|     | Minus: Consumer Advances    | 17,909     |          | 11,871      | 2,215        | 2,379      | 899       | -               | 54       |
|     | Net Investment Rate Base    | 72,264,602 |          | 47,713,308  | 8,622,851    | 9,565,807  | 3,691,525 | 422,190         | 2,248,92 |
|     | Percentage                  |            | 0.00%    | 66.03%      | 11.93%       | 13.24%     | 5.11%     | 0.58%           | 3.11     |

Exhibit 3-17 Second Revised Exhibit R Page 18 of 43 Wlitness: James Adkins Schedule E

|      |                              | Pro Forma  |           | Power Supply |             | Distribution |           |
|------|------------------------------|------------|-----------|--------------|-------------|--------------|-----------|
| Acct | Description                  | \$\$\$\$   | Demand    | Energy       | Load Center | Station      | Demand    |
| No.  |                              |            |           |              |             |              |           |
| 555  | Demand Charges               | 6,449,265  | 6,449,265 |              |             |              |           |
|      | Energy Charges               | 23,337,716 | -         | 23,337,716   |             |              |           |
| -    | Load Center Charges          | 560,772    |           | ,            | 560,772     |              |           |
|      | Power Factor Penalty         | 5,153      | 5,153     |              |             |              |           |
|      | Total Purchased Power        | 30,352,906 | 6,454,418 | 23,337,716   | 560,772     |              |           |
| 580  | Operations Supv & Eng        | 72,813     |           |              |             |              | 16,673    |
| 583  | Overhead Line Exp.           | 620,603    | -         |              |             | i i          | 251,280   |
| 584  | Underground Line Exp         | 18,650     |           |              |             |              | 4,755     |
| 585  | Street Lighting - Signal Exp | 900        |           | 4            |             |              |           |
| 586  | Meter Expense                | 262,229    |           |              |             |              |           |
| 587  | Consumer Installations       | 179,692    |           | -            |             |              | -         |
| 588  | Misc. Distribution Exp       | 511,501    |           |              |             | 0            | 117,127   |
| 589  | Rents                        |            |           |              |             |              |           |
|      | Total Operations             | 1,666,388  |           |              |             | -            | 389,834   |
| 590  | Maint Supv & Eng             | 27,614     |           |              |             |              | 10,670    |
|      |                              |            |           |              |             |              |           |
| 593  | Maint. Overhead Lines        | 2,588,787  |           | <del></del>  |             |              | 1,048,190 |
| 594  | Maint of Underground Lines   | 187,477    |           | _            |             | 1            | 47,796    |
| 595  | Maint Line Transformers      | (1,808)    |           | -            |             |              |           |
| 596  | Maint of St Lg & Signal Sys  | ·          |           |              |             |              |           |
| 597  | Maintenance of Meters        | 10,434     |           |              |             |              |           |
| 598  | Maint Misc Distrib Plant     | 118,030    |           |              |             |              | 45,608    |

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|       |                              | <del></del> | , ,       |        |          | <del></del> |          |             |          |
|-------|------------------------------|-------------|-----------|--------|----------|-------------|----------|-------------|----------|
|       |                              |             |           |        | 1        |             |          |             |          |
|       |                              |             | es        | Transf | ormers   | Services    | Meters   | Cons & Acct | Outdooi  |
| Acct_ | Description                  | \$\$\$\$    | Consumer  | Demand | Consumer | Consumer    | Consumer | Consumer    | Lighting |
| No.   |                              |             |           |        |          |             |          |             |          |
| 555   | Demand Charges               | 6,449,265   |           |        |          |             |          |             | ,        |
|       | Energy Charges               | 23,337,716  |           |        |          |             |          |             |          |
|       | Load Center Charges          | 560,772     |           |        | l        |             |          |             |          |
|       | Power Factor Penalty         | 5,153       |           |        |          | •           |          |             |          |
|       | Total Purchased Power        | 30,352,906  |           |        |          |             |          |             |          |
|       |                              |             |           |        | ,        |             |          |             |          |
| 580   | Operations Supv & Eng        | 72,813      | 19,127    | -      | -        | 7,216       | 17,646   |             | 12,15    |
| 583   | Overhead Line Exp.           | 620,603     | 265,221   |        |          | 104,102     |          |             |          |
| 584   | Underground Line Exp         | 18,650      | 10,767    |        | ·        | 3,128       |          |             |          |
| 585   | Street Lighting - Signal Exp | 900         |           |        |          |             |          |             | 90       |
| 586   | Meter Expense                | 262,229     |           |        |          |             | 262,229  |             |          |
| 587   | Consumer Installations       | 179,692     |           |        |          |             |          |             | 179,69   |
| 588   | Misc. Distribution Exp       | 511,501     | 134,363   |        |          | 50,688      | 123,957  | ,           | 85,30    |
| 589   | Rents                        |             |           |        |          |             |          |             |          |
|       | Total Operations             | 1,666,388   | 429,478   | -      |          | 165,134     | 403,832  |             | 278,11   |
|       | · .                          |             |           |        |          |             |          | 1           |          |
| 590   | Maint Supv & Eng             | 27,614      | 12,240    | (9)    | (9)      | 4,618       | 103      |             |          |
| 593   | Maint. Overhead Lines        | 2,588,787   | 1,106,345 |        |          | 434,252     |          |             |          |
| 594   | Maint of Underground Lines   | 187,477     | 108,233   |        |          | 31,448      |          |             |          |
| 595   | Maint Line Transformers      | (1,808)     |           | (907)  | (901)    |             |          | 3.          |          |
| 596   | Maint of St Lg & Signal Sys  |             |           |        |          | -           |          | j.          |          |
| 597   | Maintenance of Meters        | 10,434      |           |        |          |             | 10,434   |             | _        |
| 598   | Maint Misc Distrib Plant     | 118,030     | 52,319    | (38)   | (38)     | 19,737      | 442      | <u>:</u>    |          |

Exhibit 3-17 Second Revised Exhibit R Page 20 of 43 Wlitness: James Adkins Schedule E

| 1           | Oescription  Total Distribution Maintenance | \$\$\$\$   | Demand    | Energy     | Load Center | Station   | Demand   |
|-------------|---|------------|-----------|------------|-------------|-----------|----------|
|             | otal Distribution Maintenance               |            |           |            |             | 5,44,1011 | Demand   |
| 901 5       |   | 2,930,534  | -         |            | <u> </u>    |           | 1,152,26 |
|             | Supervision                                 | 116,256    |           |            |             |           |          |
| 902 1       | Meter Reading Expense                       | 178,127    |           | ١.         |             |           |          |
|             | Cons Recds & Collections                    | 315,292    |           |            |             |           |          |
| 904 (       | Jncollectible Accounts                      | (102,825)  |           |            |             |           |          |
|             | Total Consumer Accounts                     | 506,849    |           |            |             |           | -        |
| 907         | Supervision                                 | 32,951     |           | ,          |             |           |          |
|             | Customer Assist. Expense                    | 80,297     |           |            |             |           |          |
|             | Customer Information Exp                    | 62,500     | •         |            |             |           |          |
|             | Visc Customer Service Exp                   | 248,370    |           |            |             |           | <u> </u> |
|             | Demonstration & Selling Exp                 | (12,029)   |           |            |             | -         |          |
|             | Total Customer Service                      | 412,088    |           |            | -           |           | , =      |
| -           | Total of Above                              | 35,868,766 | 6,454,418 | 23,337,716 | 560,772     | -         | 1,542,09 |
| 920         | Administrative Salaries                     | 322,430    |           | <u> </u>   |             | -         | 88,49    |
| 921 (       | Office Supplies                             | 34,489     |           |            |             | -         | 9,40     |
| 923 (       | Outside Services                            | 46,407     | i         |            |             | -         | 12,73    |
| 930.2       | Misc. General Exp-Other                     | 380,157    |           |            |             |           | 104,34   |
|             | Directors Fees & Expenses                   | 33,430     |           |            | ·           | · -       | 9,1      |
| 931 I       | Rents                                       | (11,262)   |           |            |             | -         | (3,09    |
| 935 [       | Maintenance of General Plant                | 82,352     |           |            |             | -         | 22,6     |
| <del></del> | Total Admin & General                       | 888,004    | , ,       |            |             | -         | 243,7    |

Exhibit 3-17 Second Revised Exhibit R Page 21 of 43 Wlitness: James Adkins Schedule E

|       |                                |   | Pro Forma       | es        | Transfo | ormers   | Services    | Meters    | Cons & Acct | Outdoor  |
|-------|--------------------------------|---|-----------------|-----------|---------|----------|-------------|-----------|-------------|----------|
| Acct  | Description                    |   | <u>\$\$\$\$</u> | Consumer  | Demand  | Consumer | Consumer    | Consumer  | Consumer    | Lighting |
|       |                                |   |                 |           |         |          |             |           |             |          |
|       | Total Distribution Maintenance |   | 2,930,534       | 1,279,138 | (954)   | (948)    | 490,055     | 10,979    | -           | -        |
| _     |                                |   |                 |           |         | ·<br>    |             |           |             |          |
| 901   | Supervision                    |   | 116,256         |           |         |          |             |           | 116,256     |          |
|       |                                |   |                 |           |         | _        |             |           | -           |          |
| 902   | Meter Reading Expense          |   | 178,127         |           |         |          |             |           | 178,127     |          |
| 903   | Cons Recds & Collections       |   | 315,292         |           |         |          |             | ,         | 315,292     |          |
| 904   | Uncollectible Accounts         |   | (102,825)       |           |         |          |             |           | (102,825)   |          |
| -     | Total Consumer Accounts        |   | 506,849         |           | -       | •        |             | <u>-</u>  | 506,849     | -        |
|       |                                |   | -               |           |         |          |             |           |             |          |
| 907   | Supervision                    |   | 32,951          |           | •       |          |             | _         | 32,951      |          |
| 908   | Customer Assist. Expense       |   | 80,297          |           |         |          |             |           | 80,297      |          |
| 909   | Customer Information Exp       |   | 62,500          |           | *       |          |             |           | 62,500      |          |
| 910   | Misc Customer Service Exp      |   | 248,370         |           |         |          |             |           | 248,370     |          |
| 912   | Demonstration & Selling Exp    |   | (12,029)        |           |         |          |             |           | (12,029)    |          |
|       | Total Customer Service         |   | 412,088         | ·         | -       |          |             |           | 412,088     | -        |
|       | Total of Above                 |   | 35,868,766      | 1,708,616 | (954)   | (948)    | 655,189     | 414,811   | 918,938     | 278,110  |
|       |                                | - |                 |           |         | ` ,      | <del></del> | · · · · · |             | /        |
| 920   | Administrative Salaries        |   | 322,430         | 101,522   | (56)    | (55)     | 38,299      | 24,248    | 53,717      | 16,257   |
| 921   | Office Supplies                |   | 34,489          | 10,859    | (6)     | (6)      | 4,097       | 2,594     | 5,746       | 1,739    |
| 923   | Outside Services               |   | 46,407          | 14,612    | (8)     | (8)      | 5,512       | 3,490     | 7,731       | 2,340    |
| 930.2 | Misc. General Exp-Other        | , | 380,157         | 119,698   | (66)    | (65)     | 45,156      | 28,589    | 63,334      | 19,168   |
| 930.3 | Directors Fees & Expenses      |   | 33,430          | 10,526    | (6)     | (6)      | 3,971       | 2,514     | 5,569       | 1,686    |
| 931   | Rents                          |   | (11,262)        | (3,546)   | 2       | 2        | (1,338)     | (847)     | (1,876)     | (568)    |
| 935   | Maintenance of General Plant   |   | 82,352          | 25,930    | (14)    | (14)     | 9,782       | 6,193     | 13,720      | 4,152    |
|       | Total Admin & General          |   | 888,004         | 279,602   | (154)   | (153)    | - 105,480   | 66,781    | 147,941     | 44,773   |
|       |                                |   | -               | -         | ,,      |          | ,           |           | ,           | ,        |

CLASSIFICATION OF FUNCTIONALIZED COSTS

Exhibit 3-17 Second Revised Exhibit R Page 22 of 43 Wlitness: James Adkins Schedule E

|       |                               | Pro Forma  |            | Power Supply |             | Distribution | L        |
|-------|-------------------------------|------------|------------|--------------|-------------|--------------|----------|
| Acct  | Description _                 | \$\$\$\$   | Demand     | Energy       | Load Center | Station      | Demand   |
| 403   | Deprec. Distribution Plant    | 2,971,150  |            |              |             | -            | 913,60   |
| 403   | Deprec. General Plant         | 68,854     |            |              |             | -            | 21,172   |
|       | Total Depreciation            | 3,040,004  | <u>-</u> · | -            | <u>-</u>    | -            | 934,773  |
| 408   | Taxes Other Than Income Taxes | 53,102     |            |              |             | -            | 16,329   |
| 426.1 | Donations                     | -          |            |              |             | -            | -        |
|       | Total Miscellaneous           | 53,102     | -          | -            |             | -            | 16,32    |
|       | Total Interest on LTD         | 1,542,945  |            |              |             |              | 474,46   |
| ,     | Total Short Term Interest     | 3,964      |            |              |             |              | 1,21     |
|       | Total Costs                   | 41,396,785 | 6,454,418  | 23,337,716   | 560,772     | _            | 3,212,61 |

#### CLASSIFICATION OF FUNCTIONALIZED COSTS

Exhibit 3-17 Second Revised Exhibit R
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Wlitness: James Adkins
Schedule E

|          |                               | , | Pro Forma  | es        | Transfo | ormers   | Services  | Meters   | Cons & Acct | Outdoor  |
|----------|-------------------------------|---|------------|-----------|---------|----------|-----------|----------|-------------|----------|
| Acct     | Description                   |   | \$\$\$\$   | Consumer  | Demand  | Consumer | Consumer  | Consumer | Consumer    | Lighting |
| 403      | Deprec. Distribution Plant    |   | 2,971,150  | 1,048,045 | 177,719 | 176,672  | 393,281   | 151,804  | 17,542      | 92,486   |
| 403      | Deprec. General Plant         |   | 68,854     | 24,288    | 4,119   | 4,094    | 9,114     | . 3,518  | 407         | 2,143    |
|          | Total Depreciation            |   | 3,040,004  | 1,072,333 | 181,838 | 180,766  | 402,395   | 155,322  | 17,948      | 94,629   |
|          |                               |   |            |           |         |          |           |          |             |          |
| 408      | Taxes Other Than Income Taxes |   | 53,102     | 18,732    | 3,177   | 3,159    | 7,029     | 2,713    | 310         | 1,653    |
| 426.1    | Donations                     |   | -          |           | -       | -        | -         | -        | -           | ·        |
|          | Total Miscellaneous           |   | 53,102     | 18,732    | 3,177   | 3,159    | 7,029     | 2,713    | 310         | 1,653    |
|          | Total Interest on LTD         |   | 1,542,945  | 544,282   | 92,327  | 91,783   | 204,243   | 78,819   | 9,014       | 48,017   |
|          |                               |   |            |           |         |          |           |          |             |          |
| <u> </u> | Total Short Term Interest     | · | 3,964      | 1,398     | 237     | 236      | . 525     | 202      | 23          | 123      |
|          | Total Costs                   |   | 41,396,785 | 3,624,962 | 276,471 | 274,842  | 1,374,861 | 718,648  | 1,094,174   | 467,306  |

Exhibit 3-17 Second Revised Exhibit R Page 24 of 43 Witness: James Adkins Schedule F

|                             | A          | ccount 364 - Poles |                  |       |        |
|-----------------------------|------------|--------------------|------------------|-------|--------|
| Pole                        | Investment | Number of Units    | Unit Cost        | Size  |        |
| 35' & Under                 | 2,634,217  | 13,291             | 198.20           | 35.00 |        |
| 40 & 45'                    | 11,840,278 | 21,056             | 562.32           | 45.00 |        |
| 50 & Over                   | 1,257,023  | 1,557              | 807.34           | 60.00 |        |
| Total for Sample            | 15,731,518 | 35,904             |                  |       |        |
| X Variable - (Size)         | 33.87      |                    |                  |       |        |
| Zero Intercept              | (863.64)   |                    |                  |       | 321.86 |
| Use Minimum Size Pole       | -          |                    | 198.20           | •     |        |
| Number of poles             |            |                    | 35,904.00        |       |        |
| Consumer Related Investment |            |                    | 7,116,013.12     |       |        |
| Total Investment for sample |            | •                  | 15,731,518       |       |        |
| Percent Customer Related    |            |                    | 45.23%           |       | •      |
| Percent Demand Related      |            |                    | 45.23%<br>54.77% | •     |        |

Exhibit 3-17

## SHELBY ENERGY COOPERATIVE Case No. 2016-00434

Second Revised Exhibit R Page 25 of 43

Witness: James Adkins

Schedule F

| •                                | Account       | 365 - Overhead C | on       | ductor    |      |   |
|----------------------------------|---------------|------------------|----------|-----------|------|---|
|                                  |               | -,               |          |           |      |   |
| Conductor                        | Investment    | Number of Units  |          | Unit Cost | Amps |   |
| 8ACWC                            | 144.436       | 3,382,293        | \$       | 0.0427    | 100  | • |
| 1/0 ACSR                         | 122,795       | 2,155,455        | \$       | 0.0570    | 230  | • |
| 3/0 ACSR                         | 215,626       | 1,012,084        | \$       | 0.2131    | 315  |   |
| 4/0 ACSR                         | 999,372       | 1,187,731        | \$       | 0.8414    | 350  |   |
| 2 ACSR                           | 5,550,889     | 9,450,023        | \$       | 0.5874    | 175  |   |
| 4 ACSR                           | 70,958        | 832,312          | \$       | 0.0853    | 140  |   |
| 336 ACSR                         | 2,570,689     | 2,183,060        | \$       | 1.1776    | 500  |   |
| 6ACWC                            | 20,278        | 336,616          | \$       | 0.0602    | 140  |   |
| Duplex                           | 37,748        | 74,155           | \$       | 0.5090    |      | • |
| Triplex                          | 1,093,054     | 542,053          | \$       | 2.0165    |      |   |
| #2 ACWC                          | 321           | 16,101           | \$       | 0.0199    |      |   |
| #4 ACWC                          | 22,278        | 336,616          | \$       | 0.0662    |      |   |
| #9 1/2 ACWC                      | 1,663         | 54,226           | \$       | 0.0307    |      |   |
| #2 3-7 Strand Copper             | 31,412        | 315,395          | \$       | 0.0996    |      | • |
| 4-3 Strand Copper                | 29,821        | 445,246          | \$       | 0.0670    | •    |   |
| # 6 Strand Copper                | 166           | 1,528            | \$       | 0.1086    |      |   |
| 1/0 7 Strand Copper              | 10,494        | 81,873           | \$       | 0.1282    |      |   |
| 4/0 Quadraplex                   | 29,441        | 5,966            | \$       | 4.9348    |      |   |
| 2/0 Neural Copper                | .50           | 50               | \$       | 1.0000    |      |   |
| 350 MCM                          | 893           | 610              | \$       | 1.4639    |      |   |
| 500 MCM                          | 9,336         | 1,897            | \$       | 4.9215    | -    |   |
| #477 MCM                         | 4,349         | 1,584            | \$       | 2.7456    |      |   |
| 1/0 Solid-ALXLP Conductor        | 374           | 290              | \$       | 1.2897    | •    |   |
| Total for Sample                 | 10,966,443    | 22,417,164       | \$       | 0.4892    | •    |   |
| X Variable - (Size)              | 0.00298       | •                |          |           |      |   |
| Zero Intercept                   | 0.29412       |                  |          | •         |      |   |
| Total Amount of Conductor in Fee | et            | 22,417,164       |          |           |      |   |
| Use Zero Intercept.              | •             | 0.29412          |          | •         |      |   |
| Minimum Size Investment -Con     | sumer Related | 6,593,286.67     | Г        | 60.12%    |      |   |
| Demand Related                   |               | 4,373,156        | $\vdash$ | 39.88%    |      | • |
| Investment in Conductor          | •             | \$ 10,966,443    |          | 100.00%   | •    |   |

Exhibit 3-17 Second Revised Exhibit R

## SHELBY ENERGY COOPERATIVE Case No. 2016-00434

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Schedule F

|                                  | Account 36       | 67 - Underground ( | Conductor    |         |           |
|----------------------------------|------------------|--------------------|--------------|---------|-----------|
| Conductor                        | Investment       | Number of Units    | Unit Cost    | Amps    |           |
| 4 URD Primary                    | 276,154          | 32,719             | 8.44         | 240     |           |
| 350 URD Triplex                  | 569,555          | 59,455             | 9.58         | 320     |           |
| 1/0 KLP 25KV Primary             | 2,378,857        | 599,628            | 3.97         | 185     |           |
| 350 Primary UG                   | 90,461           | 25,874             | 3.50         | 320     | •         |
| 500 Primary UG                   | 80,044           | 6,394              | 12.52        | 520     |           |
| #2 Triplex URD                   | 19,961           | 22,313             | 0.89         | 120     |           |
| 4/0 URD Triplex                  | 18,768           | 5,279              | 3.56         | 240     |           |
| 1/0 UG Cable                     | 4,218            | 3,546              | 1.19         | 185     |           |
| #2 Solid 15KV                    | 10,361           | 15,437             | 0.67         | 182     |           |
| #4 Underground                   | 374              | 578                | 0.65         | 140     |           |
| 1/0 SOL, KLP Conductor           | 17,442           | 12,977             | 1.34         | 155     |           |
| # 10 URD                         | 72               | 210                | 0.34         | 120     |           |
| #4 Duplex URD                    | 240              | 370                | 0.65         | 184     |           |
| #6 Duplex                        | 2,702            | 2,213              | 1.22         | 225     |           |
| 2/0 URD Triplex                  | 8,835            | 2,656              | 3.33         | 225     |           |
| 4/0 QUAD UG                      | 1,003            | 532                | 1.89         | 225     | •         |
| 32 UG Triplex                    | 79               | 85                 | 0.93         |         |           |
| Total for Sample                 | 3,479,047        | 790,181            | 4.40         |         | -         |
| X Variable - (Size)              | 0.02686          |                    |              |         |           |
| Zero Intercept                   | -1.91445         |                    |              |         |           |
| Total Amount of Conductor in Fee | t                | 790,181            |              | \$      | 3.0       |
| Use Minimum Size                 | •                | 3.05413            |              |         |           |
| Minimum Size Investment -Cons    | sumer Related    | 2,413,318          | 69.37%       |         |           |
| Demand Related                   |                  | 1,065,729          | 30.63%       |         |           |
| Investment in Conductor          |                  | 3,479,047.00       | 100.00%      |         |           |
| Breakdown of Lines into Demar    | nd Related and C | onsumer Related    | Components   |         |           |
|                                  | Total Sample     | Percent '          | Ámount       | Percent | Amount    |
|                                  | Investment       | Consumer           | Consumer     | Demand  | Demand    |
| Underground Conductor            | 3,479,047        | 69.37%             | 2,413,317.57 | 30.63%  | 1,065,72  |
| Overhead Conductor               | 10,966,443       | 60.12%             | 6,593,286.67 | 39.88%  | 4,373,15  |
| Poles                            | 15,731,518       | 45.23%             | 7,116,013.12 | 54.77%  | 8,615,50  |
|                                  | 26,697,960       |                    | 13,709,300   |         | 12,988,66 |
| Percentage Allocations For Ove   | rhead Lines      |                    | 51.35%       |         | 48.65     |
| •                                | 30,177,007       |                    | 16,122,617   | · .     | 14,054,39 |
| Percentage Allocation for All Li | noe              |                    | 53.43%       |         | 46.57     |

Exhibit 3-17 Second Revised Exhibit R Page 27 of 43 Witness: James Adkins Schedule F

|                                |              | Account 368-Tra | ansformers   |           |      |
|--------------------------------|--------------|-----------------|--------------|-----------|------|
| Pole                           | Investment   | Number          | Unit Cost    | Predicted | Size |
|                                |              | of Units        |              | Value     | •    |
| 1.5KVA                         | 16,287       | 30.00           | 542.89       | 1.50      |      |
| 3.KVA CSP                      | 7,200        | 49.00           | 146.94       | 3.00      |      |
| 5KVA CSP                       | 21,760       | 166.00          | 131.08       | 5.00      |      |
| 10KVA CSP                      | 728,571      | 1,988.00        | 366.48       | 10.00     | ,    |
| 15KVA CSP                      | 4,211,823    | 7,660.00        | 549.85       | 15.00     |      |
| 25KVA CSP                      | 1,469,741    | 2,256.00        | 651.48       | 25.00     |      |
| 37.5 KVA                       | 212,769      | 278.00          | 765.36       | 37.50     |      |
| 50 KVA                         | 143,187      | 165.00          | 867.80       | 50.00     |      |
| 75KVA                          | 81,798       | 65.00           | 1,258.43     |           |      |
| 100 KVA                        | 31,121       | 17.00           | 1,830.65     |           |      |
| 167 KVA                        | 29,448       | 18.00           | 1,636.00     | •         |      |
| 250 KVA ·                      | 16,688       | 5.00            | 3,337.60     |           |      |
| 500 KVA                        | 40,741       | 11.00           | 3,703.73     |           |      |
| 500 KVA URD                    | 40,445       | 8.00            | 5,055.66     |           |      |
| 1000 KVA                       | 39,733       | 7.00            | 5,676.14     |           |      |
| 200 KVA PDMT.                  | 186,492      | 23.00           | 8,108.35     |           |      |
| 300 KVA PDMT                   | 109,895      | 15.00           | 7,326.33     |           |      |
| 750 KVA PDMT                   | 174,189      | 16.00           | 10,886.81    |           |      |
| 2500 & 3000 KVA PDMT           | 341,838      | 15.00           | 22,789.20    |           |      |
| 500 KVA PDN                    | 101,836      | 15.00           | 6,789.07     |           |      |
| 225 KVA PDMT                   | 31,860       | 6.00            | 5,310.00     |           |      |
| 1500 KVA PDMT                  | . 101,196    | 8.00            | 12,649.50    |           |      |
| 2000 KVA PDMT                  | 82,964       | 4.00            | 20,741.00    |           |      |
| 1000 KVA PDMT                  | 58,064       | 6.00            | 9,677.33     |           |      |
| STEP DOWN TRANSFOMRER          | 60,678       | 10.00           | 6,067.80     |           |      |
| 1500 KVA PAD MT                | 9,265        | 1.00            | 9,265.00     |           | •    |
| Total Sample Investment        | 8,349,589    | 12,842          | 650.18       |           |      |
| X Variable - (Size)            | 16.52        |                 |              |           |      |
| Zero Intercept                 | 324.13       |                 |              |           |      |
| Number of Transformers         |              | •               | 12,842.00    |           | ×    |
| Zero Intercept                 |              |                 | 324.13       |           |      |
| Consumer Related Investment    |              |                 | 4,162,455.86 | •         |      |
| Total Investment               |              |                 | 8,349,589.08 |           |      |
| Percentage of Investment Consu | ımer Related | Γ               | 49.85%       |           | •    |
| Percentage of Investment Dema  | nd Related   | 1               | 50.15%       |           |      |

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#### REVENUE REQUIREMENTS FOR EACH RATE CLASS

|    | Ä   | В                             | С          | D       | · E         |
|----|-----|-------------------------------|------------|---------|-------------|
| 1  |     |                               |            |         | Schedule 12 |
| 2  |     | Category                      |            | Enviro. | Residential |
| 3  |     |                               | Amount     | Watts   | Service     |
| 4  |     | Purchased Power Costs         |            |         |             |
| 5  |     | Demand - EKPC Sched E-2       | 4,345,844  |         | 2,825,682   |
| 6  |     | Demand - EKPC Sched B         | 2,108,574  |         |             |
| 7  |     | Load Center Charges           | 560,772    | ,       | 241,830     |
| 8  |     | Total Purchased Power Demand  | 7,015,190  | -       | 3,067,512   |
| 9. |     |                               |            |         |             |
| 10 |     | Energy - EKPC Sched E-2       | 15,556,216 | 3,123   | 10,406,938  |
| 11 |     | Energy - EKPC Sched B         | 7,781,500  |         |             |
| 12 |     |                               |            |         |             |
| 13 |     | Distribution Costs            |            |         |             |
| 14 |     | Demand Related                |            | ,       | _           |
| 15 |     | Lines                         | 3,212,613  |         | 1,385,424   |
| 16 |     | Transformers                  | 276,471    |         | 176,118     |
| 17 |     | Total Demand Realted          | 3,489,085  |         | 1,561,542   |
| 18 |     | ·                             |            |         |             |
| 19 |     | Consumer Related              |            | ,       |             |
| 20 |     | Lines                         | 3,624,962  |         | 2,736,109   |
| 21 | . , | Transformers                  | 274,842    |         | 199,663     |
| 22 |     | Services                      | 1,374,861  |         | 954,129     |
| 23 |     | Meters                        | 718,648    |         | 536,100     |
| 24 |     | Consumer Svc                  |            |         |             |
| 25 |     | & Accouting                   | 1,094,174  |         | 701,788     |
| 26 |     | Total Consumer Related        | 7,087,488  | ,       | 5,127,789   |
| 27 |     |                               |            | ,       |             |
| 28 |     | Outdoor Lighting              | 467,306    |         |             |
| 29 |     |                               |            |         |             |
| 30 |     | Total Costs                   | 41,396,785 | 3,123   | 20,163,781  |
| 31 |     |                               |            |         |             |
| 32 |     |                               |            |         |             |
| 33 | L   | Purchased Power Demand Costs  | 7,015,190  |         | 3,067,512   |
| 34 |     | Purchased Power Energy Costs  | 23,337,716 | 3,123   | 10,406,938  |
| 35 |     | Distribution Demand Costs     | 3,489,085  |         | 1,561,542   |
| 36 |     | Distribution Consumer Costs   | 7,087,488  |         | 5,127,789   |
| 37 |     | Distribution Outdoor Lighting | 467,306    |         | ·           |
| 38 | L   |                               |            |         |             |
| 39 |     |                               | 41,396,785 | 3,123   | 20,163,781  |

Exhibit 3-17 Second Revised Exhibit R

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Witness: James Adkins
Schedule G

#### REVENUE REQUIREMENTS FOR EACH RATE CLASS

| r        | В                             | С          | F           | G           | Н                                       | I          |
|----------|-------------------------------|------------|-------------|-------------|---|------------|
| 1        |                               |            | Schedule 12 | Schedule 15 | Schedule 11                             | Schedule 2 |
| 2        | Category                      |            | Residential | Prepay      | General                                 | Large      |
| 3        |                               | Amount     | ETS         | Service     | Service                                 | Power      |
| 4        | Purchased Power Costs         |            |             |             |   |            |
| 5        | Demand - EKPC Sched E-2       | 4,345,844  |             | 154,913     | 414,484                                 | 933,484    |
| 6        | Demand - EKPC Sched B         | 2,108,574  |             | •           | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |            |
| 7        | Load Center Charges           | 560,772    | -           | 13,130      | 37,975                                  | 78,937     |
| 8        | Total Purchased Power Demand  | 7,015,190  |             | 168,043     | 452,460                                 | 1,012,421  |
| 9        |                               | -          |             |             |   |            |
| 10       | Energy - EKPC Sched E-2       | 15,556,216 | 13,491      | 504,801     | 1,694,567                               | 2,802,694  |
| 11       | Energy - EKPC Sched B         | 7,781,500  |             |             |   |            |
| 12       |                               |            | - ,-        |             |   |            |
| 13       | Distribution Costs            |            |             |             |   |            |
| 14       | Demand Related                |            | _           |             | ,                                       |            |
| 15       | Lines                         | 3,212,613  | -           | 75,222      | 217,558                                 | 452,222    |
| 16       | Transformers                  | 276,471    | - :         | 9,686       | 26,698                                  | 19,720     |
| 17       | Total Demand Realted          | 3,489,085  | -           | 84,908      | 244,255                                 | 471,943    |
| 18       |                               |            |             |             |   |            |
| 19       | Consumer Related              | -          |             |             |   |            |
| 20       | Lines                         | 3,624,962  | -           | 135,050     | 731,520                                 | 6,978      |
| 21       | Transformers                  | 274,842    | -           | 9,855       | 63,248                                  | 1,374      |
| 22       | Services                      | 1,374,861  | 3,846       | 47,094      | 364,980                                 | 4,160      |
| 23       | Meters                        | 718,648    | 2,161       | 26,461      | 143,330                                 | 10,595     |
| 24       | Consumer Svc                  |            |             | -           |   |            |
| 25       | & Accouting                   | 1,094,174  | 2,357       | 18,763      | 343,985                                 | 5,355      |
| 26       | Total Consumer Related        | 7,087,488  | 8,364       | 237,223     | 1,647,064                               | 28,462     |
| 27       |                               |            |             |             | <u></u>                                 |            |
| 28       | Outdoor Lighting              | 467,306    |             |             |   |            |
| 29       |                               |            |             |             | <u> </u>                                |            |
| 30       | Total Costs                   | 41,396,785 | 21,856      | 994,975     | 4,038,346                               | 4,315,519  |
| 31       |                               |            |             |             |   |            |
| 32       |                               | 7.017.155  |             | 460.040     | 452.452                                 | 1.043.434  |
|          | Purchased Power Demand Costs  | 7,015,190  | -           | 168,043     | 452,460                                 | 1,012,421  |
|          | Purchased Power Energy Costs  | 23,337,716 | 13,491      | 504,801     | 1,694,567                               | 2,802,694  |
| -        | Distribution Demand Costs     | 3,489,085  | -           | 84,908      | 244,255                                 | 471,943    |
| $\vdash$ | Distribution Consumer Costs   | 7,087,488  | 8,364       | 237,223     | 1,647,064                               | 28,462     |
| 37       | Distribution Outdoor Lighting | 467,306    |             |             |   |            |
| 38       |                               | 41 200 705 | 24.056      | 004075      | 4 020 240                               | / 21E E10  |
| 39       | <u></u>                       | 41,396,785 | 21,856      | 994,975     | 4,038,346                               | 4,315,519  |

Exhibit 3-17 Second Revised Exhibit R Page 30 of 43
Witness: James Adkins
Schedule G

#### REVENUE REQUIREMENTS FOR EACH RATE CLASS

|    | B ·                           | С          | J               | K               | L        | M          |
|----|-------------------------------|------------|-----------------|-----------------|----------|------------|
| 1  |                               |            | Schedule B1     | Schedule B2     | Outdoor  |            |
| 2  | Category                      |            | Large           | Large           | & Street |            |
| 3  |                               | Amount     | Industrial Rate | Industrial Rate | Lighting | Total      |
| 4  | Purchased Power Costs         | •          |                 |                 |          | . 1        |
| 5  | Demand - EKPC Sched E-2       | 4,345,844  | _               | -               | 17,281   | 4,345,844  |
| 6  | Demand - EKPC Sched B         | 2,108,574  | 1,505,553       | 603,021         |          | 2,108,574  |
| 7  | Load Center Charges           | 560,772    | 136,476         | 49,127          | 3,297    | 560,772    |
| 8  | Total Purchased Power Demand  | 7,015,190  | 1,642,029       | 652,148         | 20,577   | 7,015,190  |
| 9  |                               |            |                 | ·               |          |            |
| 10 | Energy - EKPC Sched E-2       | 15,556,216 | -               | -               | 130,602  | 15,556,216 |
| 11 | Energy - EKPC Sched B         | 7,781,500  | 5,174,681       | 2,606,820       |          | 7,781,500  |
| 12 |                               |            | -               |                 |          |            |
| 13 | Distribution Costs            |            |                 |                 |          |            |
| 14 | Demand Related                |            |                 |                 |          |            |
| 15 | Lines                         | 3,212,613  | 781,859         | 281,441         | 18,886   | 3,212,613  |
| 16 | Transformers .                | 276,471    | 31,000          | 12,495          | 755      | 276,471    |
| 17 | Total Demand Realted          | 3,489,085  | 812,859         | 293,937         | 19,641   | 3,489,085  |
| 18 |                               |            |                 |                 |          | -          |
| 19 | Consumer Related              |            |                 |                 |          |            |
| 20 | Lines                         | 3,624,962  | 11,929          | 3,151           | 225      | 3,624,962  |
| 21 | Transformers                  | 274,842    | 363             | 203             | 136      | 274,842    |
| 22 | Services                      | 1,374,861  | -               | -               | 652      | 1,374,861  |
| 23 | Meters                        | 718,648    | -               | · -             | -        | 718,648    |
| 24 | Consumer Svc                  |            |                 |                 |          |            |
| 25 | & Accouting                   | 1,094,174  | 5,927           | 15,626          | 373      | 1,094,174  |
| 26 | Total Consumer Related        | 7,087,488  | 18,219          | 18,980          | 1,386    | 7,087,488  |
| 27 |                               |            |                 |                 |          |            |
| 28 | Outdoor Lighting              | 467,306    |                 |                 | 467,306  | 467,306    |
| 29 |                               |            |                 |                 |          |            |
| 30 | Total Costs                   | 41,396,785 | 2,473,108       | 965,064         | 639,512  | 41,396,785 |
| 31 |                               |            |                 |                 |          |            |
| 32 |                               |            |                 |                 |          |            |
| 33 | Purchased Power Demand Costs  | 7,015,190  | 1,642,029       | 652,148         | 20,577   | 7,015,190  |
|    | Purchased Power Energy Costs  | 23,337,716 | 5,174,681       | 2,606,820       | 130,602  | 23,337,716 |
| 35 | Distribution Demand Costs     | 3,489,085  | 812,859         | 293,937         | 19,641   | 3,489,085  |
| 36 | Distribution Consumer Costs   | 7,087,488  | 18,219          | 18,980          | 1,386    | 7,087,488  |
| 37 | Distribution Outdoor Lighting | 467,306    |                 |                 | 467,306  | 467,306    |
| 38 |                               |            |                 |                 |          |            |
| 39 |                               | 41,396,785 | 7,647,788       | 3,571,884       | 639,512  | 41,396,785 |

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# Exhibit 3-17Second Revised Exhibit R Page 31 of 43 Witness: James Adkins Schedule I

#### **Consumer Related Costs Allocators**

| Α. | Lines | (poles | and o | conduit) |
|----|-------|--------|-------|----------|
|    |       |        |       |          |

|  | Number of<br>Consumers | Allocation<br><u>Percent</u> |
|--|------------------------|------------------------------|
| Schedule 12 - Residential              | 12,156                 | 75.48%                       |
| Off-Peak Marketing-ETS                 | . 0                    | 0.00%                        |
| Schedule 15 - Prepay Service           | 600                    | 3.73%                        |
| Schedule 11 - General Service          | 3,250                  | 20.18%                       |
| Schedule 2 - Large Power               | 53                     | 0.19%                        |
| Schedule B1 - Large Industrial Rate    | 14                     | 0.33%                        |
| Schedule B2 - Large Industrial Rate    | 1                      | 0.09%                        |
| Schedule 5 - Outdoor & Security Lights | . 31                   | 0.01%                        |
| Envirowatts                            | -                      | 0.00%                        |
|  | 16,105                 | 1.0000                       |
|  | •                      |                              |

| Schedule 5 - Outdoor | & Security Lights |
|----------------------|-------------------|
| B. Transformers      |                   |

31 Minimum

| Rate Class         Number of Consumers         Transformer Cost         Relative Cost         Allocation Percent           Schedule 12 - Residential         12,156         \$ 549.85         1.00         12,156.00         72.647%           Off-Peak Marketing-ETS         -         0.000%         -         0.000%         0.000%         3.586%           Schedule 15 - Prepay Service         600         \$ 549.85         1.00         600.00         3.586%           Schedule 11 - General Service         3,250         651         1.18         3,850.70         23.013%           Schedule 2 - Large Power         53         868         1.58         83.65         0.500%           Schedule B1 - Large Industrial Rate         14         868         1.58         22.10         0.132%           Schedule 5 - Outdoor & Security Lights         31         147         0.27         8.28         0.050%           Envirowatts         -         NA         -         0.000% | D. Halisionners                        |           | WILLIAM     |          |              |            |
|---|--|-----------|-------------|----------|--------------|------------|
| Schedule 12 - Residential       12,156       \$ 549.85       1.00       12,156.00       72.647%         Off-Peak Marketing-ETS       -       -       0.000%         Schedule 15 - Prepay Service       600       \$ 549.85       1.00       600.00       3.586%         Schedule 11 - General Service       3,250       651       1.18       3,850.70       23.013%         Schedule 2 - Large Power       53       868       1.58       83.65       0.500%         Schedule B1 - Large Industrial Rate       14       868       1.58       22.10       0.132%         Schedule B2 - Large Industrial Rate       1       6,789       12.35       12.35       0.074%         Schedule 5 - Outdoor & Security Lights       31       147       0.27       8.28       0.050%         Envirowatts       -       NA       -       0.000%  |  | Number of | Transformei | Relative |              | Allocation |
| Off-Peak Marketing-ETS         -         0.000%           Schedule 15 - Prepay Service         600 \$ 549.85         1.00 600.00         3.586%           Schedule 11 - General Service         3,250 651 1.18 3,850.70         23.013%           Schedule 2 - Large Power         53 868 1.58 83.65 0.500%           Schedule B1 - Large Industrial Rate         14 868 1.58 22.10 0.132%           Schedule B2 - Large Industrial Rate         1 6,789 12.35 12.35 0.074%           Schedule 5 - Outdoor & Security Lights         31 147 0.27 8.28 0.050%           Envirowatts         - NA - 0.000%  | Rate Class                             | Consumers | Cost        | _Cost_   | Weight       | Percent    |
| Off-Peak Marketing-ETS         -         0.000%           Schedule 15 - Prepay Service         600 \$ 549.85         1.00 600.00         3.586%           Schedule 11 - General Service         3,250 651 1.18 3,850.70         23.013%           Schedule 2 - Large Power         53 868 1.58 83.65 0.500%           Schedule B1 - Large Industrial Rate         14 868 1.58 22.10 0.132%           Schedule B2 - Large Industrial Rate         1 6,789 12.35 12.35 0.074%           Schedule 5 - Outdoor & Security Lights         31 147 0.27 8.28 0.050%           Envirowatts         - NA - 0.000%  |  |           |             |          |              |            |
| Schedule 15 - Prepay Service       600       \$ 549.85       1.00       600.00       3.586%         Schedule 11 - General Service       3,250       651       1.18       3,850.70       23.013%         Schedule 2 - Large Power       53       868       1.58       83.65       0.500%         Schedule B1 - Large Industrial Rate       14       868       1.58       22.10       0.132%         Schedule B2 - Large Industrial Rate       1       6,789       12.35       12.35       0.074%         Schedule 5 - Outdoor & Security Lights       31       147       0.27       8.28       0.050%         Envirowatts       -       NA       -       0.000%  | Schedule 12 - Residential              | 12,156    | \$ 549.85   | 1.00     | 12,156.00    | 72.647%    |
| Schedule 11 - General Service       3,250       651       1.18       3,850.70       23.013%         Schedule 2 - Large Power       53       868       1.58       83.65       0.500%         Schedule B1 - Large Industrial Rate       14       868       1.58       22.10       0.132%         Schedule B2 - Large Industrial Rate       1       6,789       12.35       12.35       0.074%         Schedule 5 - Outdoor & Security Lights       31       147       0.27       8.28       0.050%         Envirowatts       -       NA       -       0.000%  | Off-Peak Marketing-ETS                 | -         |             |          | , <b>-</b> . | 0.000%     |
| Schedule 2 - Large Power       53       868       1.58       83.65       0.500%         Schedule B1 - Large Industrial Rate       14       868       1.58       22.10       0.132%         Schedule B2 - Large Industrial Rate       1       6,789       12.35       12.35       0.074%         Schedule 5 - Outdoor & Security Lights       31       147       0.27       8.28       0.050%         Envirowatts       -       NA       -       0.000%  | Schedule 15 - Prepay Service           | 600       | \$ 549.85   | 1.00     | 600.00       | 3.586%     |
| Schedule B1 - Large Industrial Rate       14       868       1.58       22.10       0.132%         Schedule B2 - Large Industrial Rate       1       6,789       12.35       12.35       0.074%         Schedule 5 - Outdoor & Security Lights       31       147       0.27       8.28       0.050%         Envirowatts       -       NA       -       0.000%  | Schedule 11 - General Service          | 3,250     | 651         | 1.18     | 3,850.70     | 23.013%    |
| Schedule B2 - Large Industrial Rate       1       6,789       12.35       12.35       0.074%         Schedule 5 - Outdoor & Security Lights       31       147       0.27       8.28       0.050%         Envirowatts       -       NA       -       0.000%   | Schedule 2 - Large Power               | 53        | 868         | 1.58     | 83.65        | 0.500%     |
| Schedule 5 - Outdoor & Security Lights         31         147         0.27         8.28         0.050%           Envirowatts         - NA         - 0.000%  | Schedule B1 - Large Industrial Rate    | 14        | 868         | 1.58     | 22.10        | 0.132%     |
| Envirowatts NA 0.000%   | Schedule B2 - Large Industrial Rate    | 1         | 6,789       | 12.35    | 12.35        |            |
|   | Schedule 5 - Outdoor & Security Lights | 31        | 147         | 0.27     | 8.28         |            |
| 16,105 16,733.08 100.0%   | Envirowatts                            |           | NA          |          | <del> </del> |            |
|   |  | 16,105    |             |          | 16,733.08    | 100.0%     |

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# Exhibit 3-17 Second Revised Exhibit R Page 32 of 43 Witness: James Adkins Schedule I

#### **Consumer Related Costs Allocators**

| C. Services                            |              | Minim   | ,        |              |            |
|--|--------------|---------|----------|--------------|------------|
| •                                      |              | Service | Relative |              | Allocation |
| Rate Class                             | # of Consume | Cost    | _ Cost_  | Weight       | Percent    |
| Schedule 12 - Residential              | 12,156       | 27.74   | 1.00     | 12,156.00    | 69.40%     |
| Off-Peak Marketing-ETS                 | 49           | 27.74   | 1.00     | 49.00        | 0.28%      |
| Schedule 15 - Prepay Service           | 600          | 27.74   | 1.00     | 600.00       | 3.43%      |
| Schedule 11 - General Service          | 3,250        | 39.69   | 1.43     | 4,650.00     | 26.55%     |
| Schedule 2 - Large Power               | <b>53</b> ·  | 27.74   | 1.00     | 53.00        | 0.30%      |
| Schedule B1 - Large Industrial Rate    | 14           | , =     | _        | -            | 0.00%      |
| Schedule B2 - Large Industrial Rate    | 1            | -       | _        | -            | 0.00%      |
| Schedule 5 - Outdoor & Security Lights | 31           | 7.43    | 0.27     | 8.31         | 0.05%      |
| Envirowatts                            |              | •       | -        | <del>-</del> | 0.00%      |
|  | 16,154       |         |          | 17,516.31    | 1.00       |

| D. Meters                              |              | Minimum       |                  |           |                       |
|--|--------------|---------------|------------------|-----------|-----------------------|
| Rate Class                             | # of Consume | Meter<br>Cost | Relative<br>Cost | Weight    | Allocation<br>Percent |
| Schedule 12 - Residential              | 12,156       | 124.44        | 1.00             | 12,156.00 | 74.60%                |
| Off-Peak Marketing-ETS                 | . 49         | 124.44        | 1.00             | 49.00     | 0.30%                 |
| Schedule 15 - Prepay Service           | 600          | 124.44        | 1.00             | 600.00    | 3.68%                 |
| Schedule 11 - General Service          | 3,250        | 124.44        | 1.00             | 3,250.00  | 19.94%                |
| Schedule 2 - Large Power               | . 53         | 564.09        | 4.53             | 240.25    | 1.47%                 |
| Schedule B1 - Large Industrial Rate    | 14           | <b>-</b> ,    | -                |           | 0.00%                 |
| Schedule B2 - Large Industrial Rate    | 14           | _             |                  | -         | 0.00%                 |
| Schedule 5 - Outdoor & Security Lights | 31           | _             | -                | _         | 0.00%                 |
| Envirowatts                            | <u> </u>     | -             | -                | <u> </u>  |                       |
| ·                                      | 16,167       |               |                  | 16,295.25 | 1.00                  |

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Exhibit 3-17 Second Revised Exhibit R Page 33 of 43 Witness: James Adkins

Schedule I

#### E. Consumer & Accounting Services

#### **Consumer Related Costs Allocators**

| Rate Class                             | Number of Consumers | Relative<br>Weight<br>Meter Read | Relative<br>Weight<br>ICons Rcds | Relative<br>Weight<br>Cust Asst | Combined<br>Relative<br>Weights | Weight     | Allocation<br>Percent |
|--|---------------------|----------------------------------|----------------------------------|---------------------------------|---------------------------------|------------|-----------------------|
| Schedule 12 - Residential              | 12,156              | 1.00                             | 4.00                             | 1.00                            | 6.00                            | 72,936     | 64.14%                |
| Off-Peak Marketing-ETS                 | 49                  | 1.00                             | 3.00                             | 1.00                            | 5.00                            | 245        | 0.22%                 |
| Schedule 15 - Prepay Service           | 600                 | 1.00                             | 1.00                             | 1.25                            | 3.25                            | 1,950      | 1.71%                 |
| Schedule 11 - General Service          | 3,250               | 1.00                             | 8.00                             | 2.00                            | 11.00                           | 35,750     | 31.44%                |
| Schedule 2 - Large Power               | 53                  | 2.00                             | 0.50                             | 8.00                            | 10.50                           | 557        | 0.49%                 |
| Schedule B1 - Large Industrial Rate    | 14                  | 4.00                             | 20.00                            | 20.00                           | 44.00                           | 616        | 0.54%                 |
| Schedule B2 - Large Industrial Rate    | 14                  | 4.00                             | 72.00                            | 40.00                           | 116.00                          | 1,624      | 1.43%                 |
| Schedule 5 - Outdoor & Security Lights | ` 31                | -                                | 0.25                             | 1.00                            | 1.25                            | 39         | 0.03%                 |
| Envirowatts                            | -                   | -                                | -                                | 0.50                            | 0.50                            | -          | 0.00%                 |
|  |                     |                                  |                                  |                                 | _                               | 113,716.25 | 100.00%               |

|  | Meter Reading |          |                    | Consumer Records |        |                    |  |
|--|---------------|----------|--------------------|------------------|--------|--------------------|--|
|  |               |          | Relative<br>Weight |                  |        | Relative<br>Weight |  |
|  | Factor        | _Weight_ |                    | Factor           | Weight |                    |  |
| Schedule 12 - Residential              | 1.00          | 1.00     | 1.00               | 4.00             | 1.00   | 4.00               |  |
| Off-Peak Marketing-ETS                 | 1.00          | 1.00     | 1.00               | 3.00             | 1.00   | 3.00               |  |
| Schedule 15 - Prepay Service           | 1.00          | 1.00     | 1.00               | 1.00             | 1.00   | 1.00               |  |
| Schedule 11 - General Service          | 1.00          | 1.00     | 1.00               | 4.00             | 2.00   | 8.00               |  |
| Schedule 2 - Large Power               | 2.00          | 1.00     | 2.00               | 0.25             | 2.00   | 0.50               |  |
| Schedule B1 - Large Industrial Rate    | 4.00          | 1.00     | 4.00               | 5.00             | 4.00   | 20.00              |  |
| Schedule B2 - Large Industrial Rate    | 4.00          | 1.00     | 4.00               | 12.00            | 6.00   | 72.00              |  |
| Schedule 5 - Outdoor & Security Lights | . <b>-</b>    | 1.00     | · <b>-</b>         | 0.50             | 6.00   | 0.25               |  |
| Envirowatts                            | -             |          | -                  | -                | 1.00   |                    |  |

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#### **Consumer Related Costs Allocators**

Exhibit 3-17
Second Revised Exhibit R
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Witness: James Adkins
Schedule I

#### Consumer Assistance

Relative Weight

|  |        |        | vveigni |
|--|--------|--------|---------|
|  | Factor | Weight |         |
| Schedule 12 - Residential              | 1.00   | 1.00   | 1.00    |
| Off-Peak Marketing-ETS                 | 1.00   | 1.00   | 1.00    |
| Schedule 15 - Prepay Service           | 1.00   | 1.25   | 1.25    |
| Schedule 11 - General Service          | 1.00   | 2.00   | 2.00    |
| Schedule 2 - Large Power               | 2.00   | 4.00   | 8.00    |
| Schedule B1 - Large Industrial Rate    | 2.00   | 4.00   | 20.00   |
| Schedule B2 - Large Industrial Rate    | 2.00   | 20.00  | 40.00   |
| Schedule 5 - Outdoor & Security Lights | 2.00   | 10.00  | 1.00    |
| Envirowatts                            | 0.50   | 1.00   | 0.50    |

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|                        |                 |                                       |                |               | -          |                 | · · ·       | Т         |   |
|------------------------|-----------------|---------------------------------------|----------------|---------------|------------|-----------------|-------------|-----------|---|
| <del></del>            |                 |                                       |                | —-            |            |                 |             | -         |   |
| A. Energy Sales        | Allocation is p | roportional on                        | actual sales t | o end use cus | tomers     |                 |             |           | _   |
|                        | Schedule 12     | Schedule 12                           | Schedule 15    | Schedule 11   | Schedule 2 | Schedule B1     | Schedule B2 | Outdoor   | <del></del> -                                 |
|                        | Residential     | Residential                           | Prepay         | General       | Large      | Large           | Large       | & Street  | Total   |
| Month                  | Service         | ETS                                   | Service        | Service       | Poewr      | Industrial Rate |             | Lighting  | <u>,, , , , , , , , , , , , , , , , , , ,</u> |
|                        |                 |                                       |                |               | -          |                 |             |           |   |
| August                 | 17,174,695      | 967                                   | 870,284        | 2,739,123     | 4,543,164  | 11,045,414      | 5,831,557   | 207,287   | 42,412,491                                    |
| September              | 13,841,511      | 2,294                                 | 473,055        | 2,460,851     | 4,266,648  | 10,180,109      | 5,487,469   | 204,948   | 36,916,885                                    |
| October                | 11,606,299      | 10,184                                | 483,391        | 2,328,156     | 4,238,565  | 10,324,608      | 5,468,976   | 206,069   | 34,666,248                                    |
| November               | 14,697,943      | 30,292                                | 820,517        | 2,413,762     | 4,040,863  | 9,647,402       | 5,153,374   | 208,106   | 37,012,259                                    |
| December               | 17,433,737      | 39,652                                | 1,032,504      | 2,582,570     | 4,158,523  | 9,598,393       | 5,108,500   | 207,025   | 40,160,904                                    |
| January                | 24,223,972      | 63,486                                | 1,136,214      | 3,188,907     | 4,742,109  | 10,211,443      | 5,265,218   | 205,734   | 49,037,083                                    |
| February               | 21,864,580      | 60,018                                | 994,394        | 3,046,225     | 4,530,958  | 9,856,916       | 5,110,716   | 202,068   | 45,665,875                                    |
| March                  | 14,419,581      | 27,747                                | 738,181        | 2,444,967     | 4,310,673  | 10,595,459      | 5,207,473   | 202,832   | 37,946,913                                    |
| April                  | 12,607,289      | 13,573                                | 575,030        | 2,391,175     | 4,226,374  | 10,526,408      | 5,125,289   | 201,704   | 35,666,842                                    |
| May                    | 12,005,147      | 4,640                                 | 621,024        | 2,292,839     | 4,326,537  | 11,133,512      | 5,411,781   | 202,904   | 35,998,384                                    |
| June                   | 16,773,599      | 187                                   | 799,147        | 2,876,605     | 4,510,470  | 11,695,657      | 5,232,369   | 201,157   | 42,089,191                                    |
| July                   | 18,607,133      | 84                                    | 927,366        | 3,028,372     | 4,689,401  | 11,355,039      | 5,157,411   | 200,522   | 43,965,328                                    |
| Total - EKPC Schedul E | 195,255,486     | 253,124                               | 9,471,107      | 31,793,552    | 52,584,285 | -               | -           | 2,450,356 | 291.807.910                                   |
| Percent                | 66.91%          | 0.09%                                 | 3.25%          | 10.90%        | 18.02%     | 0.00%           | 0.00%       | 0.84%     | 100.00%                                       |
| Total - EKPC Schedul B |                 | ·                                     |                |               |            |                 | 1           |           | ·   |
| Percent Percent        |                 |                                       | -              | -             |            | 126,170,360     | 63,560,133  |           | 189,730,493                                   |
| Leireill               |                 | · · · · · · · · · · · · · · · · · · · |                |               |            | 66.50%          | 33.50%      | -         | 100.00%                                       |
|                        |                 |                                       |                |               |            |                 |             |           |   |
|                        |                 |                                       |                |               |            | 1               |             |           |   |
|                        | <del></del>     | L                                     |                |               |            | ·               |             |           |   |

Exhibit 3-17 Second Revised Exhibit R Page 36 of 43 Witness: James Adkins] Schedule H

| <del></del> _          |                    | 1                 |                | -                   |                  |                 |             |             |   |
|------------------------|--------------------|-------------------|----------------|---------------------|------------------|-----------------|-------------|-------------|---|
|                        |                    |                   |                |                     |                  |                 |             |             |   |
| B. Wholesale Billing   | CD Contributions   | <del></del> -     |                |                     |                  |                 |             |             | <del> </del>                                  |
| B. wholesale billing   | CP Contributions   | -                 |                |                     |                  |                 |             |             |   |
|                        | ·                  | -                 | -              |                     |                  |                 |             |             |   |
|                        | Schedule 12        | Schedule 12       | Schedule 15    | Schedule 11         | Schedule 2       | Schedule B1     | Schedule B2 | Outdoor     |   |
| <del></del>            | Residential        | Residential       | Prepay         | General             | Large            | Large           | Large       | & Street    | Total   |
| Month                  | Service            | ETS               | Service        | Service             | Poewr            | Industrial Rate |             | Lighting    | <u>,, , , , , , , , , , , , , , , , , , ,</u> |
| MOTHE                  |                    |                   |                | , 9511,05           |                  |                 |             |             |   |
| August                 | 34,700             |                   | 3,169          | 6,936               | 11,169           | 21,674          | 8,735       | _           | 86,383  |
| September              | - 34,331           | _                 | 1,658          | 8,552               | 11,320           | 20,996          | 8,735       | -           | 85,592  |
| October                | 20,522             | -                 | 1,023          | 3,466               | 9,546            | 20,252          | 8,530       | -           | 63,339  |
| November               | 31,508             |                   | 1,815          | 5,005               | 9,805            | 20,267          | 8,243       | 511         | 77,154  |
| December               | 33,471             | -                 | 1,666          | 4,876               | 10,718           | 19,284          | 8,173       | 507         | 78,695  |
| January                | 56,149             | -                 | 2,374          | 3,429               | 13,292           | 19,472          | 8,113       | 507         | 103,336                                       |
| February               | 48,807             |                   | 2,538          | 4,133               | 12,483           | 19,598          | 8,268       | 506         | 96,333  |
| March                  | 35,666             | -                 | 1,878          | 2,187               | 12,704           | 20,142          | 7,914       | 504         | 80,995  |
| April                  | 25,136             | -                 | 1,355          | 2,640               | 12,901           | 20,863          | 8,120       |             | 71,015  |
| May                    | 23,945             | -                 | 1,327          | 6,298               | 9,843            | 22,175          | 8,286       | -           | 71,874  |
| June                   | 33,879             | -                 | 1,897          | 7,490               | 10,832           | 23,400          | 8,545       | -           | 86,043  |
| July                   | 36,401             | -                 | 2,025          | 5,791               | 12,325           | 23,343          | 9,058       |             | 88,943  |
| Total - EKPC Schedu    | IE 414,515         |                   | 22,725         | 60,803              | 136,938          | _               | -,          | 2,535       | 637,516                                       |
| Percent                | 65.02%             | 0.00%             | +              | 9.54%               | 21.48%           | 0.00%           | 0.00%       | 0.40%       | 100.00%                                       |
| Total - EKPC Schedu    | IB —               |                   | ,              |                     |                  | 251,466         | 100,720     |             | 352,186                                       |
| Percent                |                    |                   |                |                     |                  | 71.4%           | 28.6%       |             | 100%  |
|                        |                    | <del></del>       | <u> </u>       | <u> </u>            | <u> </u>         |                 |             | • •         |   |
| Used to allocate whole | esale power demand | costs to rate cla | isses. Wholesa | ale power dema<br>T | ina is billed on | pasis of CP den |             |             |   |
|                        |                    |                   |                |                     |                  |                 | ,           | +           |   |
|                        |                    | -                 |                | -                   |                  |                 |             | <del></del> | -   |
|                        |                    |                   |                |                     |                  |                 |             | · ·         |   |
| <u> </u>               |                    | <u> </u>          |                | <u> </u>            |                  |                 | , ,         |             |   |

Exhibit 3-17 Second Revised Exhibit R Page 37 of 43 Witness: James Adkins] Schedule H

| C Monthly Book D       | emands for Each Rate   | Clace           |                   |             |            |                 |                 |          |             |
|------------------------|------------------------|-----------------|-------------------|-------------|------------|-----------------|-----------------|----------|-------------|
| C. Monthly Feak D      | Emanus for Lacif Nac   |                 |                   | -           |            |                 |                 |          |             |
|                        | <del>-</del>           |                 |                   |             |            |                 |                 |          |             |
|                        |                        |                 |                   |             |            |                 |                 |          |             |
|                        | Schedule 12            | Schedule 12     | Schedule 15       | Schedule 11 | Schedule 2 | Schedule B1     | Schedule B2     | Outdoor  |             |
|                        | Residential            | Residential     | Prepay            | General     | Large      | Large           | Large           | & Street | Total       |
| <u>Month</u>           | Service                | ETS             | Service           | Service     | Poewr      | Industrial Rate | Industrial Rate | Lighting |             |
|                        | 0.4750                 |                 | 0.474             | 7 000       | 40.000     | 04.745          | 0.705           | 544      | 07.00       |
| August                 | 34,756                 | · <u>-</u> .    | 3,174             | 7,089       | 12,002     | 21,715          | 8,735           | 514      | 87,985      |
| September              | 34,331                 | <u>-</u>        | 1,658             | 8,552       | 11,924     | 21,040          | 8,735           | 504      | 86,744      |
| October                | 23,511                 | -               | 1,173             | 3,466       | 11,337     | 20,291          | 8,530           | 508      | 68,816      |
| November               | 38,322                 | -               | 1,925             | 5,005       | 11;301     | 20,272          | 8,243           | 511      | 85,579      |
| December               | 41,020                 | -               | 2,041             | 4,876       | 11,503     | 19,278          | 8,173           | 507      | 87,398      |
| January_               | 56,149                 | -               | 2,448             | 4,901       | 13,292     | 19,520          | 8,113           | 507      | 104,930     |
| February               | 48,807                 | -               | 2,538             | 4,961       | 12,483     | 19,616          | 8,268           | 507      | 97,180      |
| March                  | 36,533                 | -               | 1,922             | 4,247       | 12,704     | 20,170          | 7,914           | 506      | 83,996      |
| April                  | 27,012                 | -               | 1,456             | 6,601       | 12,901     | 20,900 -        | 8,120           | 504      | 77,494      |
| May                    | 28,645                 |                 | 1,588             | 6,298       | 11,829     | 22,223          | 8,286           | 505      | . 79,374    |
| June                   | 34,850                 |                 | 1,952             | 7,490       | 11,778     | 23,430          | 8,545           | 505      | 88,550      |
| July                   | 42,288                 | -               | 2,353             | 6,586       | 12,600     | 23,370          | 9,058           | 505      | 96,760      |
| Total                  | 446,224                | -               | 24,228            | 70,072      | 145,654    | 251,825         | 90,648          | 6,083    | 1,034,734   |
| Percent                | 43.12%                 | 0.00%           | 2.34%             | 6.77%       | 14.08%     | 24.34%          | 8.76%           | 0.59%    | 100.009     |
|                        |                        |                 |                   |             |            |                 |                 |          | <del></del> |
| Jsed to allocate distr | ibution demand related | costs to approp | oriate rate class | ses         |            | <del></del>     |                 |          |             |

Exhibit 3-17 Second Revised Exhibit R Page 38 of 43 Witness: James Adkins] Schedule H

|                       |              | 0.400           | 0.450          | 0.450       | 0.400       | 0.474      | 0.470             | 0.404               | 0.400     | 2.400       |
|-----------------------|--------------|-----------------|----------------|-------------|-------------|------------|-------------------|---------------------|-----------|-------------|
| 2,458                 | 2,461        | 2,462           | 2,456          | 2,458       | 2,463       | 2,471      | 2,478             | 2,484               | 2,490     | 2,492       |
|                       |              |                 |                |             |             |            | <del></del>       |                     | · · · · · |             |
|                       |              |                 |                |             |             |            |                   | _                   |           |             |
| D C of                | Canaumana In | dividual Monthl | y Book Domon   | do          |             |            |                   |                     | -         | <del></del> |
| D. Sum or             | Consumers in | dividual Month  | y Peak Dellian | us          | -           | •          |                   |                     | -         |             |
|                       |              |                 |                |             |             |            |                   |                     |           | <del></del> |
|                       |              | Schedule 12     | Schedule 12    | Schedule 15 | Schedule 11 | Schedule 2 | Schedule B1       | Schedule B2         | Outdoor   |             |
|                       |              | Residential     | Residential    | Prepay      | General     | Large      | Large             | Large               | & Street  | Total       |
| Month                 | <del></del>  | Service         | ETS            | Service     | Service     | Poewr      | Industrial Rate   | _                   | Lighting  | TOTAL       |
| IVIOITEI              | ·            |                 |                |             |             | 1 00111    | industrial ( tate | III.dubiiidi i tulo | Lighting  |             |
| A                     |              | 102,777         |                | 9,385       | 18,537      | 13,029     | 21,561            | 8,735               | 514       | 174,538     |
| August  <br>September |              | 102,777         |                | 5,048       | 19,183      | 12,864     | 20,885            | 8,735               | 504       | 174,336     |
| October               |              | 115,281         |                | 5,751       | 16,439      | 12,688     | 20,140            | 8,530               | 508       | 179,337     |
| November              | -            | 133,055         | -              | 6,682       | 21,330      | 13,433     | 20,103            | 8,243               | 511       | 203,357     |
| December              |              | 131,813         |                | 6,559       | 21,500      | 12,930     | 19,116            | 8,173               | 507       | 200,598     |
| January               |              | 123,492         |                | 6,272       | 12,927      | 13,754     | 19,339            | 8,113               | 507       | 184,404     |
| February              |              | 130,728         | -              | 6,799       | 16,745      | 13,588     | 19,426            | 8,268               | 506       | 196,060     |
| March                 |              | 126,956         | _              | 6,678       | 16,051      | 13,916     | 19,988            | 7,914               | 504       | 192,007     |
| April                 |              | 119,787         |                | 6,457       | 16,263      | 12,705     | 20,747            | 8,120               | 505       | 184,584     |
| May                   |              | 115,173         |                | 6,386       | 19,380      | 12,824     | 22,068            | 8,286               | 506       | 184,623     |
| June                  |              | 105,088         |                | 5,885       | 19,467      | 13,126     | 23,284            | 8,545               | 505       | 175,900     |
| July                  |              | 110,935         | -              | 6,172       | 17,379      | 14,099     | 23,222            | 9,058               | 506       | 181,371     |
|                       |              |                 |                |             | ,           |            |                   |                     |           |             |
| Total                 |              | 1,419,620       | -              | 78,074      | 215,201     | 158,956    | 249,879           | 100,720             | 6,083     | 2,228,533   |
| ,                     |              |                 |                |             |             |            |                   |                     |           |             |
| Percent               |              | 63.70%          | 0.00%          | 3.50%       | 9.66%       | 7.13%      | 11.21%            | 4.52%               | 0.27%     | 100.00%     |
|                       |              |                 |                |             |             |            |                   |                     |           |             |
| l                     |              | -               |                |             |             |            |                   |                     |           |             |

Exhibit 3-17
Second Revised Exhibit R
Page 39 of 43
Witness: James Adkins]
Schedule J

#### REVENUE FROM RATES MATCHED WITH REVENUE REQUIREMENTS

|                                   |              |        | Schedule 12 | Schedule 12 | Schedule 15 | Schedule 11 |
|-----------------------------------|--------------|--------|-------------|-------------|-------------|-------------|
|                                   |              | Enviro | Residential | Residential | Prepay      | General     |
|                                   | Amount       | Watts  | Service     | ETS         | Service     | Service     |
| Normalized Revenue from Rates     | \$39,969,502 | 3,715  | 18,776,920  | 15,486      | 906,485     | 3,429,381   |
| Wholesale Demand Costs            |              |        |             |             | -           |             |
| Generation                        | 6,454,418    |        | 2,825,682   | -           | 154,913     | 414,484     |
| Distribution Substation           | 560,772      |        | 241,830     |             | 13,130      | 37,975      |
| Total Wholesale Demand            | 7,015,190    | -      | 3,067,512   | _           | 168,043     | 452,460     |
| Wholesale Energy Costs            | 23,337,716   | 3,123  | 10,406,938  | 13,491      | 504,801     | 1,694,567   |
| Total Wholesale Costs             | 30,352,906   | 3,123  | 13,474,450  | 13,491      | 672,844     | 2,147,027   |
|                                   | • .          |        |             |             |             |             |
| Gross Margin                      | 9,616,596    | 592    | 5,302,470   | 1,995       | 233,641     | 1,282,354   |
| Distribution Demand Costs         |              |        |             |             |             |             |
| Lines                             | 3,212,613    |        | 1,385,424   | _           | 75,222      | 217,558     |
| Transformers                      | 276,471      |        | 176,118     | -           | 9,686       | 26,698      |
| Total Distribution Demand         | 3,489,085    |        | 1,561,542   | <u>-</u>    | 84,908      | 244,255     |
| Distribution Consumer             |              |        |             |             |             | _]          |
| Lines                             | 3,624,962    |        | 2,736,109   | -           | 135,050     | 731,520     |
| Transformers                      | 274,842      |        | 199,663     | <b>-</b> .  | 9,855       | 63,248      |
| Services                          | 1,374,861    |        | 954,129     | 3,846       | 47,094      | 364,980     |
| Meters                            | 718,648      |        | 536,100     | 2,161       | 26,461      | 143,330     |
| Consumer Services                 | 1,094,174    | -      | 701,788     | 2,357       | 18,763      | 343,985     |
| Lighting                          | 467,306      |        | •           |             | -           |             |
| Total Distribution Consumer       | 7,554,794    | -      | 5,127,789   | 8,364       | 237,223     | 1,647,064   |
|                                   |              |        |             | ,           |             |             |
| Total Distribution Costs          | 11,043,879   | 1      | 6,689,331   | 8,364       | 322,131     | 1,891,319   |
|                                   |              |        |             |             |             |             |
| Margin before Other Revenue       | (1,427,283)  | 592    | (1,386,861) | (6,370)     | (88,491)    | (608,965)   |
|                                   |              |        |             | -           |             |             |
| Allocation of Other Elec. Revenue | 637,530      |        | 517,932     | -           | 25,004      | 94,594      |
| Allocation of Misc. Revenue       | 142,353      | -      | 115,648     | 1           | 5,583       | 21,122      |
|                                   |              |        |             |             |             |             |
| Net Margin                        | . (647,399)  | 592    | (753,280)   | (6,370)     | (57,904)    | (493,249)   |

Exhibit 3-17 Second Revised Exhibit R Page 40 of 43 Witness: James Adkins]

Schedule J

#### REVENUE FROM RATES MATCHED WITH REVENUE REQUIREMENTS

| · · · · · · · · · · · · · · · · · · · | Schedule 2 | Schedule B1     | Schedule B2     | Outdoor   |             |
|---------------------------------------|------------|-----------------|-----------------|-----------|-------------|
| ·                                     | Large      | Large           | Large           | & Street  |             |
|                                       | Power      | Industrial Rate | Industrial Rate | Lighting  | Total       |
| Normalized Revenue from Rates         | 4,178,722  | 8,511,553       | 3,610,886       | 536,355   | 39,969,502  |
| Wholesale Demand Costs                |            |                 |                 |           |             |
| Generation                            | 933,484    | 1,505,553       | 603,021         | 17,281    | 6,454,418   |
| Distribution Substation               | 78,937     | 136,476         | 49,127          | 3,297     | 560,772     |
| Total Wholesale Demand                | 1,012,421  | 1,642,029       | 652,148         | 20,577    | 7,015,190   |
| Wholesale Energy Costs                | 2,802,694  | 5,174,681       | 2,606,820       | 130,602   | 23,337,716  |
| Total Wholesale Costs                 | 3,815,115  | 6,816,710       | 3,258,967       | 151,179   | 30,352,906  |
|                                       |            |                 |                 |           |             |
| Gross Margin                          | 363,607    | 1,694,843       | 351,918         | 385,176   | 9,616,596   |
| Distribution Demand Costs             |            |                 | •               | ,         |             |
| Lines                                 | 452,222    | 781,859         | 281,441         | 18,886    | 3,212,613   |
| Transformers                          | 19,720     | -               | -               | 755       | 232,976     |
| Total Distribution Demand             | 471,943    | 781,859         | 281,441         | 19,641    | 3,445,589   |
| Distribution Consumer                 |            |                 |                 |           | 1           |
| Lines                                 | 6,978      | 11,929          | 3,151           | 225       | 3,624,962   |
| Transformers                          | 1,374      | 31,363          | 12,698          | 136       | 318,337     |
| Services                              | 4,160      | ÷               | -               | 652       | 1,374,861   |
| Meters                                | 10,595     | -               | -               |           | 718,648     |
| Consumer Services                     | 5,355      | 5,927           | 15,626          | 373       | 1,094,174   |
| Lighting                              |            |                 |                 | 467,306   | 467,306     |
| Total Distribution Consume            | 28,462     | 49,219          | 31,475          | 468,692   | 7,598,289   |
|                                       |            | ,               |                 |           | -           |
| Total Distribution Costs              | 500,404    | 831,079         | 312,916         | 488,333   | 11,043,878  |
|                                       |            |                 |                 |           | -           |
| Margin before Other Revenue           | (136,797)  | 863,764         | 39,002          | (103,157) | (1,427,282) |
|                                       |            |                 |                 |           | -           |
| Allocation of Other Elec. Revenue     | -          | 1               | -               | -         | 637,530     |
| Allocation of Misc. Revenue           |            |                 | ,-              | -         | 142,353     |
|                                       |            |                 |                 |           | -           |
| Net Margin                            | (136,797)  | 863,764         | 39,002          | (103,157) | (647,399)   |

#### SHELBY ENERGY COOPERATIVE CAȘE NO. 2016-00434 INCREASE FOR EACH RATE CLASS

Exhibit 3-17 Second Revised Exhibit R Page 41of 43 Witness: James Adkins Schedule K

|                              | En  | viro- | S        | chedule 12  | Scl            | hedule 12  | S              | chedule 15 | S              | chedule 11 |
|------------------------------|-----|-------|----------|-------------|----------------|------------|----------------|------------|----------------|------------|
|                              | W   | 'atts | F        | Residential | Re             | esidential |                | Prepay     |                | General    |
|                              |     |       |          | Service     |                | ETS        |                | Service    |                | Service    |
| Revenue Requirements         |     |       |          | -           |                |            |                |            |                |            |
| Total Costs                  | \$  | 3,123 | \$       | 20,163,781  | <del>(</del> 5 | 21,856     | <del>(S)</del> | 994,975    | 63             | 4,038,346  |
| Plus Margin Requirements     |     | _     |          | 696,182     |                | 18,297     |                | 115,711    |                | 84,497     |
| Revenue Requirements         | \$  | 3,123 | \$       | 20,859,963  | \$             | 40,153     | \$             | 1,110,687  | <del>(/)</del> | 4,122,843  |
| Minus Revenue from Rates     |     | 3,715 |          | 18,776,920  |                | 15,486     |                | 906,485    |                | 3,429,381  |
| Increase Amount              |     | (592) |          | 2,083,043   |                | 24,667     |                | 204,202    |                | 693,462    |
| Less: Other Revenue          |     | -     |          | 633,581     |                |            |                | 30,587     |                | 115,716    |
| Net Increase Amount          |     | (592) |          | 1,449,463   |                | 24,667     |                | 173,615    |                | 577,746    |
| Less: Increase for Rate Clas | ses |       | \$       | 1,150,630   | \$             | 413        | \$             | 83,237     | \$             | 287,006    |
| Under (Over) Recovery        | \$  | (592) | \$       | 298,833     | \$             | 24,254     | \$             | 90,378     | \$             | 290,740    |
|                              |     |       |          |             |                |            |                |            |                |            |
| Statement of Operations with |     |       |          |             |                |            |                |            |                |            |
| Revenue from Rates           |     | 3,715 |          | 18,776,920  |                | 15,486     |                | 906,485    |                | 3,429,381  |
| Rate Increase                | \$  | -     | \$       | 1,150,630   | <del>(</del> 5 | 413        | \$             | 83,237     | \$             | 287,006    |
| Purchased Power Costs        |     | 3,123 |          | 13,474,450  |                | 13,491     |                | 672,844    |                | 2,147,027  |
| Gross Margins                | ,   | 592   |          | 6,453,100   |                | 2,408      |                | 316,878    |                | 1,569,360  |
| Distribution Costs           |     | -     |          | 6,689,331   |                | 8,364      |                | 322,131    |                | 1,891,319  |
| Margins before Other Rev.    |     | 592   |          | (236,231)   |                | (5,957)    |                | (5,254)    |                | (321,959)  |
| Plus Other Revenue           |     | -     |          | 633,581     |                | -          |                | 30,587     |                | 115,716    |
| Net Margins with Increase    | \$  | 592   | \$       | 397,350     | \$             | (5,957)    | \$             | 25,333     | \$             | (206,243)  |
| Interest Expense             |     |       | $\vdash$ | 928,243     | -              | 24,396     |                | 154,282    |                | 112,663    |
| TIER                         |     | -     |          | 1.43        |                | 0.76       |                | 1.16       |                | (0.83)     |
| OTIER                        |     |       |          | 1.30        |                | 0.76       |                | 1.13       |                | (1.02)     |
| Rate Base                    |     |       |          | 44,043,868  |                | 624,967    |                | 10,036,873 |                | 2,143,614  |
| Return on Rate Base          |     |       |          | 3,01%       |                | 2.95%      |                | 1.79%      |                | -4.37%     |

#### SHELBY ENERGY COOPERATIVE CASÉ NO. 2016-00434 INCREASE FOR EACH RATE CLASS

Exhibit 3-17 Second Revised Exhibit R Page 42 of 43 Witness: James Adkins Schedule K

|              | Schedule 2   | S   | chedule B1   | S     | chedule B2    |          | Outdoor   |  |   |
|--------------|--|---|--|-------|---------------|----------|-----------|--|---|
|              | Large  |   | Large  |       | Large         |          | & Street  |  | Total   |
|              | Power  | Inc   | lustrial Rate  | Inc   | lustrial Rate |          | Lighting  |  |   |
| its          |  |   |  |       |               |          |           |  |   |
|              | \$ 4,315,519   | \$  | 7,647,788  | \$    | 3,571,884     | \$       | 639,512   | \$   | 41,396,785  |
| ements       | 62,640   |   | 103,897  |       | 37,396        |          | 38,587    | \$   | 1,157,209   |
| ents S       | \$ 4,378,159   | \$  | 7,751,686  | \$    | 3,609,280     | \$       | 678,099   | \$   | 42,553,993  |
| n Rates      | 4,178,722  |   | 8,511,553  |       | 3,610,886     |          | 536,355   |  | 39,969,502  |
|              | 199,437  |   | (759,867)  |       | (1,606)       |          | 141,744   |  | 2,584,491   |
| Je 💮         | -  |   | -  |       | -             |          |           |  | 779,884   |
|              | 199,437  |   | (759,867)  |       | (1,606)       |          | 141,744   |  | 1,804,607   |
| Rate Clas    | \$ 121,818   | \$  | 251,625  |       | 60,507        | \$       | 42,314    |  | 1,997,550   |
| very         | \$ 77,619  | \$  | (1,011,492)  | \$    | (62,113)      | \$       | 99,430    | \$   | (192,943  |
| ·I           | •  |   |  |       |               |          |           |  |   |
| ns with      |  |   |  |       |               |          |           |  |   |
| s            | 4,178,722  |   | 8,511,553  |       | 3,610,886     |          | 536,355   |  | 39,969,502  |
|              | \$ 121,818   | \$  |  | \$    | 60,507        | \$       | 42,314    |  | 1,997,550   |
| osts         | 3,815,115  |   | 6,816,710  |       | 3,258,967     |          | 151,179   |  | 30,352,906  |
|              | 485,425  |   | 1,946,468  |       | 412,425       |          | 427,490   |  | 11,614,146  |
|              | 500,404  |   | 831,079  |       | 312,916       |          | 488,333   |  | 11,043,878  |
| er Rev.      | (14,979)   |   | 1,115,389  |       | 99,509        |          | (60,843)  |  | 570,268   |
| <del>,</del> | -  |   | -  |       |               | ``       | -         |  | 779,884   |
| rease S      | \$ (14,979)  | \$  | 1,115,389  | \$    | 99,509        | \$       | (60,843)  | \$   | 1,350,151   |
|              | 83,520   |   | 138,530  |       | 49,861        | <u> </u> | 51,449    |  | 1,542,945   |
| -            | 0.82   |   | 9.05   |       | 3.00          |          |           |  | 1.88  |
|              | 0.82   |   | 9.05   |       | 3.00          |          | (0.18)    |  | 1.78  |
| _ +          | 3,664,555  |   | 6,164,673  | -     | 2,237,315     |          | 2,397,186 |  | 71,313,050  |
| e            |  |   |  |       | 6.68%         |          | -0.39%    |  | 4.06%   |
|              | ements ents ents n Rates  ue nt Rate Clas every ns with s costs er Rev. eccrease | Large Power  nts  \$ 4,315,519 ements 62,640 ents \$ 4,378,159 m Rates 4,178,722 199,437 ue nt 199,437 Rate Clas \$ 121,818 every \$ 77,619 ns with s 4,178,722 \$ 121,818 Costs 3,815,115 485,425 500,404 er Rev. (14,979) erease \$ (14,979) erease \$ (14,979) 3,664,555 | Large Power Inc  1ts  \$ 4,315,519 \$  ements 62,640 ents \$ 4,378,159 \$  m Rates 4,178,722 199,437 ue nt 199,437 Rate Clas \$ 121,818 \$  very \$ 77,619 \$  ns with s 4,178,722 \$ 121,818 \$  Costs 3,815,115 485,425 500,404 er Rev. (14,979) erease \$ (14,979) \$  83,520 0.82 0.82 3,664,555 | Large | Large         | Large    | Large     | Large Large Large & Street  Power Industrial Rate Industrial Rate Lighting  1ts  \$ 4,315,519 \$ 7,647,788 \$ 3,571,884 \$ 639,512  ements 62,640 103,897 37,396 38,587  ents \$ 4,378,159 \$ 7,751,686 \$ 3,609,280 \$ 678,099  In Rates 4,178,722 8,511,553 3,610,886 536,355  199,437 (759,867) (1,606) 141,744  ue | Large Large Large & Street  Power Industrial Rate Industrial Rate Lighting  \$ 4,315,519 \$ 7,647,788 \$ 3,571,884 \$ 639,512 \$  ements 62,640 103,897 37,396 38,587 \$  ents \$ 4,378,159 \$ 7,751,686 \$ 3,609,280 \$ 678,099 \$  n Rates 4,178,722 8,511,553 3,610,886 536,355  199,437 (759,867) (1,606) 141,744  ue |

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Exhibit 3-17 Second Revised Exhibit R Page 43 of 43 Witness: James Adkins Schedule L

#### **Unbundled Rate Base**

| • .       |                |            | Schedule I   | Schedule I | Schedule II | Schedule II | Schedule III | Schedule IV  | Schedule IV-A | Schedule VI |            |
|-----------|----------------|------------|--------------|------------|-------------|-------------|--------------|--------------|---------------|-------------|------------|
|           |                |            | Residential, | Marketing  | Sml Com     | Sml Com     | 3 Phase Schl | Large Power  | Large Power   | Outdoor     |            |
|           |                | Amount     | Schl & Chur  | Rate       | 1 Phase     | 3 Phase     | & Churches   | 2500 kW Plu: | 50-2500 kW    | Lights      | Total      |
| Function  | Classification |            |              | ŀ          |             |             |              |              |               |             |            |
| Stations  |                |            |              |            |             |             |              |              |               |             |            |
|           | Demand         | -          | -            |            | н           |             |              | -            |               |             | <u>-</u>   |
| Lines     |                | 47,713,308 |              |            |             |             |              |              |               |             |            |
|           | Demand         | 23,212,708 | 10,010,368   | -          | 543,519     | 1,571,960   | 3,267,529    | 5,649,317    | 2,033,552     | 136,463     | 23,212,708 |
|           | Consumer       | 24,500,600 | 18,492,971   | -          | 4,944,238   | 47,160      | 80,629       | 21,298       | 1,521         | -           | 23,587,818 |
| Transform | er             | 8,622,851  |              |            |             | v           | _            | -            |               |             | -          |
|           | Demand         | 4,324,168  | 2,754,581    | _          | 151,492     | 417,569     | 308,433      | 484,857      | 195,434       | 11,803      | 4,324,168  |
|           | Consumer       | 4,298,683  | 3,122,844    | 154,138    | 989,236     | 21,489      | 5,676        | 3,172        | 2,128         |             | 4,298,683  |
| Services  |                |            |              |            | ·           |             |              |              |               |             |            |
|           | Consumer       | 9,565,807  | 6,638,498    | 327,665    | 2,539,406   | 28,944      | -            |              | 4,536         | -           | 9,539,048  |
| Meters    |                | -          |              |            |             |             | <del></del>  |              |               | -           |            |
|           | Consumer       | 3,691,525  | 2,753,820    | 135,924    | 736,255     | 54,426      | -            | -            | -             | -           | 3,680,425  |
| Consumer  | Acct & Serv.   | 422,190    | 270,787      | 7,240      | 132,728     | 2,066       | 2,287        | 6,029        | 144           |             | 421,280    |
| Outdoor L | ighting        | 2,248,920  |              |            |             |             | .,           |              |               | 2,248,920   | 2,248,920  |
| Total     |                | 72,264,602 | 44,043,868   | 624,967    | 10,036,873  | 2,143,614   | 3,664,555    | 6,164,673    | 2,237,315     | 2,397,186   | 71,313,050 |

Witness: James Adkins

## Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

18. Refer to Shelby Energy's response to Staff's Second Request, Item 22. Identify all changes that were made to the original Exhibit J which are reflected in revised Exhibit J.

#### Response 18:

The change made to the Original Exhibit J and reflected in the Revised Exhibit J was as follows:

1) Envirowatts – Changed the rate from \$.02875 per kWh to \$.02750 per kWh but failed to do so in the proposed Phase 2 on Page 10 of 10.

The changes made to the Revised Exhibit J and are reflected in the Second Revised Exhibit J are as follows:

- 1) Rate 15 Prepay Service --Updated for a 365 customer charges instead of 360 customer service charges.
- Envirowatts -- Changed the rate from \$.02875 per kWh to \$.02750 per
   kWh in all areas.
- 3) Rate 11 General Service -- Recalculated the primary service discount.
- 4) Rate 2 Large Power -- Recalculated the primary service discount
- Rate B1 Large Industrial Rate -- Recalculated the primary service discount.

Refer to **USB Drive (D)** for an electronic version of the Second Revised Schedule J, labeled **Exhibit 3-12**.

Question 19
Page 1 of 1
Witness: Debra Martin

## Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

19. Refer to Staff's Second Request, Item 29. Provide the same information in the same format for the test year ended July 31, 2016, as was provided in this response. Provide the response in Excel spreadsheet format with the formulas intact and unprotected, and all rows and columns accessible.

#### Response 19:

Refer to the <u>Confidential</u> electronic version of the Excel spreadsheet contained on **USB Drive (C)** labeled **Exhibit 3-19** for the Wages and Benefits for the test year ending July 31, 2016.

## Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

- 20. Refer to Shelby Energy's response to Staffs Second Request, Items 30, 33, and 43.
- a. For the test year and calendar year 2016, provide the health insurance cost Shelby Energy would have incurred for non-union employees, assuming that the total cost equals the premium for each level of coverage plus the deductible (In Network), and that for single coverage the employee would pay 21 percent of the total cost and that for all other types of coverage, the employee would pay 32 percent of the total cost.
- b. Does Shelby Energy pay life insurance premiums on behalf of its employees? If so, provide the number of employees with life insurance coverage of \$50,000 and the total cost of the life insurance coverage above the \$50,000 coverage for all such employees.
- c. For the 401 (k) plan, provide the amount that Shelby Energy paid on behalf of the employees in the NRECA R&S plan (those hired before 2009) in the test year and in calendar year 2016.
- d. Explain the reasons for the differences in the amounts Shelby Energy contributes to the 401 (k) plan for union and non-union employees.

#### Response 20a:

Refer to **Exhibit 3-20a** for the health insurance costs that would be incurred by Shelby Energy.

Case No. 2016-00434

Response 20b:

Yes. Shelby Energy does pay life insurance premiums on behalf of its employees.

The number of employees is 47 for 2016 and 44 for the test year. The total cost of the

life insurance coverage above the \$50,000 coverage for these employees is \$6,332.25

for 2016 and \$6,243.01 for the Test Year.

Response 20c:

The amount of 401K contributions Shelby Energy paid on behalf of the employees

in the NRECA R&S plan (those hired before 2009) in 2016 was \$22,902.

The amount of 401K contributions Shelby Energy paid on behalf of the employees

in the NRECA R&S plan (those hired before 2009) for the Test Year was \$24,046.

Response 20d:

The elimination of the NRECA RS Plan was initiated and the contribution

level by Shelby Energy for the 401K plan was established for all employees at that time.

Shortly thereafter, the operations employees elected to vote in the union and became a

bargaining unit to be represented by the IBEW. As with any wage or pay increase for

union employees, any benefits or benefits level are the result of negotiation between

Shelby Energy and the representatives of the IBEW.

2016-00434

Witness: Debra Martin

#### Shelby Energy Cooperative, Inc.

| 2016                   | Total<br>Healthcare<br>Cost | Shelby's<br>Healthcare<br>Cost | Employees'<br>Premiums<br>Cost | Employees' Deductible | % Paid By<br>Shelby | % Paid by<br>Employees |
|------------------------|-----------------------------|--------------------------------|--------------------------------|-----------------------|---------------------|------------------------|
|                        | а                           | b                              | , C                            | d                     | e                   | f ·                    |
| Single                 | \$ 5,520.16                 | \$ 4,360.93                    | \$ 759.23                      | \$ 400.00             | 79%                 | 21%                    |
| Employee + Spouse      | 13,104.20                   | 8,910.86                       | 3,393.34                       | 800.00                | 68%                 | 32%                    |
| Employee + Children    | 12,322.92                   | 8,379.59                       | 2,743.33                       | 1,200.00              | 68%                 | 32%                    |
| Employee + Family      | 18,129.36                   | 12,327.96                      | 4,601.40                       | 1,200.00              | 68%                 | 32%                    |
| Total                  | \$ 49,076.64                | \$ 33,979.34                   | \$ 11,497.30                   | \$ 3,600.00           | •                   |                        |
|                        | Faralana                    | Faralana                       |                                |                       |                     |                        |
|                        | Employee +                  | Employee +                     | Employee +                     |                       |                     |                        |
| ,                      | Family                      | Spouse                         | Children                       | Single Only           |                     |                        |
| Number of Participants | . 4                         | 3                              | 4                              | 13                    |                     | •                      |

| Test Year           | Н         | Total<br>lealthcare<br>Cost | Shelby's<br>ealthcare<br>Cost | mployees'<br>remiums<br>Cost | ployees'<br>ductible | % Paid By<br>Shelby | id by<br>oyees |
|---------------------|-----------|-----------------------------|-------------------------------|------------------------------|----------------------|---------------------|----------------|
|                     |           | а                           | b                             | С                            | d                    | е                   | f              |
| Single              | <u>\$</u> | 5,520.16                    | \$<br>4,360.93                | \$<br>759.23                 | \$<br>400.00         | 79%                 | 21%            |
| Employee + Spouse   |           | 13,104.20                   | 8,910.86                      | 3,393.34                     | 800.00               | 68%                 | 32%            |
| Employee + Children |           | 12,322.92                   | 8,379.59                      | 2,743.33                     | 1,200.00             | 68%                 | 32%            |
| Employee + Family   |           | 18,129.36                   | 12,327.96                     | 4,601.40                     | 1,200.00             | 68%                 | 32%            |
| Total               | \$        | 49,076.64                   | \$<br>33,979.34               | \$<br>11,497.30              | \$<br>3,600.00       | •                   |                |
|                     |           |                             |                               |                              |                      |                     |                |

| ·                      | Employee + | Employee +          | Employee + |        |        |
|------------------------|------------|---------------------|------------|--------|--------|
|                        | Family     | Spouse <sup>*</sup> | Children   | Single | e Only |
| Number of Participants | . 4        | 1 3                 | 3 4        |        | 13     |

- 21. Refer to Shelby Energy's response to Staffs Second Request, Item 40.
- a. Describe in detail the process the Rural Utilities Service ("RUS") undertakes in reviewing and approving/disapproving changes in depreciation rates by rural electric cooperatives.
- b. Has RUS approved the changes in Shelby Energy's depreciation rates? If not, provide the timeline for gaining approval of the new depreciation rates.

#### Response 21a:

RUS requires a depreciation study to be submitted to adopt rates outside the high and low ranges established in Bulletin 184-1. Shelby would submit its depreciation study to the RUS using the same model that RUS will use when it prepares depreciation studies. It is Shelby's understanding that when the depreciation study is submitted to RUS, the review, approval or denial of depreciation rate changes are determined by a depreciation committee ("Committee"). If there are questions, the Committee will make a request for information.

#### Response 21b:

RUS has not approved the changes in Shelby Energy's depreciation rates.

Recently, April 27, 2017, Shelby Energy submitted the Depreciation Study to RUS. As soon as any correspondence from RUS is received, it will be forwarded to the Commission.

Question 21 Page 2 of 2 Witness: James Adkins

## Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

Based on the information provided by the RUS field accountant, the approximate timeline for gaining approval is approximately 3-4 months after receipt of the Depreciation Study.

Witness: Debra Martin

## Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

22. Refer to Shelby Energy's response to Staffs Second Request, Item 46. Does Shelby Energy have any employees who are related? If so, provide the names and titles of such employees.

#### Response 22:

Shelby Energy has no employees who are related and follows the content of Board Policy No. 900 in regards to employment as provided in the following items of Section II, Content:

- A. "close relative" of a current Shelby Energy employee, director, or attorney shall not be employed by Shelby Energy on a permanent basis. "Close relative" shall be defined as a person who by blood or marriage, including half, step and adoptive kin is either a spouse, child, grandchild, parent, grandparent, brother, sister, aunt, uncle, nephew, or niece of the employee, board member, or attorney.
- D. If a Shelby Energy employee is in a domestic partnership with a current Shelby Energy employee, director, or attorney, or with a close relative of a current Shelby Energy employee, director or attorney, the employee will not be allowed to continue their employment with Shelby Energy. If two (2) Shelby Energy employees are affected, only one of the employees will be allowed to continue their employment with Shelby Energy. If the affected employees cannot decide which of them will terminate, the employee with the least service to Shelby Energy will be terminated at the end of thirty (30) days. A 'domestic partnership' as used in this policy shall be defined as an interpersonal relationship between two individuals of the same or opposite sex who live together and share a common domestic life, but are not married to each other.
- Q. Should two (2) employees marry after becoming employed at Shelby Energy, only one of the employees will be allowed to continue their employment with Shelby Energy. If the affected employees cannot decide which of them will terminate, the employee with the least service to Shelby Energy will be terminated at the end of 30 days.

Witness: Debra Martin

## Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

23. Refer to Shelby Energy's response to Staffs Second Request, Item 48. State the account(s) in which Renewable Energy Program tariff revenues are recorded.

#### Response 23:

The Renewable Energy Program tariff revenues are recorded in the applicable revenue class of the service to which the rider applies, which for all services is account 440.10 – Residential Energy Sales.

Question 24
Page 1 of 1
Witness: Debra Martin

## Shelby Energy Cooperative, Inc. Commission Staff's Third Request for Information Case No. 2016-00434

24. Refer to Staffs Second Request, Item 50. Provide the amount of Capital Credits Shelby Energy paid in 2016.

#### Response 24:

Shelby Energy retired the following Capital Credits in 2016:

| General     | Estate             | Total              |
|-------------|--------------------|--------------------|
| Retirements | <u>Retirements</u> | <u>Retirements</u> |
| \$467,737   | \$131,219          | \$598,956          |